

GENERAL VIEW

GENERAL VIEW

OF THE

COUNTY OF CORNWALL.

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GENERAL AD. ALLEN

COMPTON CORP.

GENERAL VIEW
OF THE
COUNTY OF CORNWALL.

WITH
OBSERVATIONS ON THE MEANS OF ITS IMPROVEMENT.

*— R Academies & London
Board of Agriculture.*
BY ROBERT FRASER, A. M.

**DRAWN UP FOR THE CONSIDERATION OF THE BOARD OF AGRICULTURE
AND INTERNAL IMPROVEMENT.**

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GENERAL VIEW

COUNTY OF CORNWALL

BY ROBERT FAIRBANKS

IN TWO VOLUMES

THE FIRST VOLUME CONTAINS
A DESCRIPTION OF THE COUNTY

LONDON

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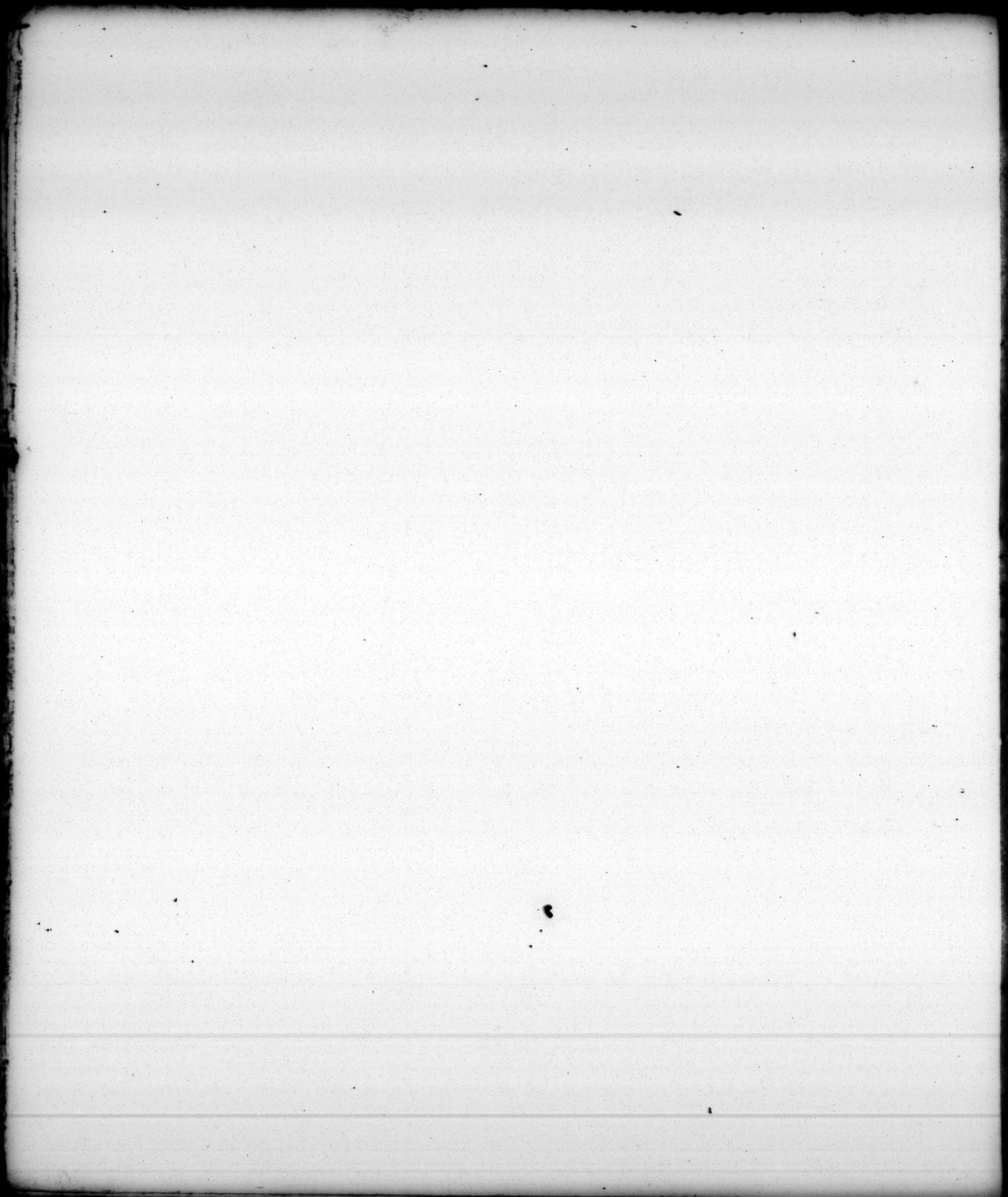
TO THE READER.

IT is requested that this paper, may be returned to the Board of Agriculture, at its Office in London, with any additional remarks and observations which may occur on the perusal, *written on the margin*, as soon as may be convenient.

It is hardly necessary to add, that this Report is, at present, printed and circulated, for the purpose merely, of procuring farther information respecting the husbandry and internal improvements of this district, and of enabling every one, to contribute his mite to the improvement of the country.

The Board has adopted the same plan, in regard to all the other counties in the united kingdom; and will be happy to give every assistance in its power, to any person, who may be desirous of improving his breed of cattle, sheep, &c. or of trying any useful experiment in Husbandry.

LONDON, MARCH 1794.



GENERAL INTRODUCTION

TO THE

SURVEY OF THE COUNTIES

OF

DEVON AND CORNWALL.

THE Board of Agriculture and Internal Improvement having, in some measure, left the general arrangement of investigation, and the scheme of the subsequent Report, to those employed in the respective districts allotted to them, I felt my attention naturally directed, in the first place, to a general view of the leading features of the ancient kingdom of Dunmonium. * †

Notwithstanding the advantages of these countries, in point of climate, their local situation led me not to expect an equal advancement, with many other parts of the kingdom, in those new improvements in the

* It is well known, that the kingdom of Dunmonium comprehended the extensive and valuable district of Devon and Cornwall. The name is derived from the tin with which these counties singularly abound.

† derived from "Dun" (a Hill) & "Mwyn" (metal) included Devon & Cornwall - & part of Somerset.
- Borlase's Antig. -

the rural arts, which have of late years excited so much zeal and enterprise in the more internal parts of the kingdom.

remarkable for their attention to their Sheep & Cattle in the neighbourhood of Mevagissey & Probus and particularly all round Exeter for many miles.

+ yet many small Towns, but not $\frac{1}{3}^d$ of these are supplied with Fish - on the contrary - this is a scarce article, by no means equal to one half of the Demand, through Devon in general, and one half of Cornwall.

* It may well be doubted * if more than a Quarter part (probably not so much) of these are capable of any lasting Improvement by Tillage - at least not so, as to produce any clear profit + more than is now produced (without Expence) by pasture of Hardy Animals only - amongst such parts as are ornamented with large Moor Stones (and these are considerable) Tillage most certainly would not. + how far plantations of hardy Trees & Shrubs would answer, seems a more necessary Enquiry.

From their maritime situation, which of course directed their attention to the fisheries and to commerce, their distance from the great mart of the metropolis, their possessing [†] few very large towns, [†] and these towns well supplied with fish, [†] it is not to be wondered at, that the industry of the inhabitants is not so much directed to the improvement of their breed of cattle and sheep, or that they will so readily perceive the advantage of such improvements, as those who live within a nearer circuit of Smithfield market.

The ocean, that great object of attraction to English enterprise, and the spirit of adventure so congenial to the human breast, seem, in these counties, to [†] have attracted the inhabitants towards the sea-shore. [†] The mines, and not agriculture, have peopled the situations remote from the sea.

[†] too much so but the Admiralty there have other Fish to pay i.e. Smuggling.

The internal parts of the country have remained hitherto uncultivated, and present to the view immense tracts of uncultivated wastes and undivided commons, entirely in a state of nature, and, excepting the mining districts, almost without inhabitants.

The admiration of a stranger is naturally excited by observing, in a country so anciently settled as Dunmonium,

Dummonium, that cultivation has proceeded so short a space from the coasts of the sea, and not been pushed farther to supply the channels of commerce, which would seem most naturally to depend on internal resources.

Retrograde as is the actual order of things, it has happened in most countries of Europe, that commerce has been the first object of attention. Agriculture and internal improvements follow slowly in her train, and late employ the superabundant capital collected by the wandering sailor from various climes.

To accelerate this progress, and to point out proper objects *at home* for the employment of this superabundant wealth, has long engaged the assiduous attention of the gentleman to whom the public are indebted for the plan of this excellent institution;† and if I shall be able to point out any circumstances to the Board that may lead to the farther extension of the internal improvement of the districts I have had the honour to survey, I hope that it may make up for my report containing less of minute detail, which the extent of these counties in a great measure precludes me from being able to comprehend in this Survey.

The very inadequate sketch of these extensive counties, which these pages contain, will, I hope, meet with the candid consideration of the Board.

B

Sufficient

+ the Dummonii, by ancient & modern writers, have been praised for their Skill, and Industry, in Husbandry — perhaps the short space they have proceeded from the coast may be as long as it will, rationally, answer the purpose — as a sign of the gentleman who has inclosed much of Dartmoor land & spared neither pains nor Expence how much Mr. Gent has he been offered for his Money & capital? &c.

† most excellent indeed — and from which much good may, rationally, be expected to follow. — W.S.

Sufficient recompence will be made even for its omissions or errors, if it shall be the humble instrument of calling forth the pens of some of the many able and well informed individuals who inhabit those parts of the kingdom.

*and therefore Mr. J^r
will pardon the Freedom used in pointing
out any seeming Errors or Omissions
there certainly are. Yet the publick
are indebted to Mr. J^r for even this
hasty Sketch of the Agriculture
used in Cornwall &c.*

CORNWALL.*

SECT. I.

EXTENT.

CORNWALL is the most westerly county of Britain. It extends also further to the south than any other. The latitude of the Lizard Point is 49 deg. 57 min. 30 sec. which is 11 min. 30 sec. farther south than the Start Point, the most southerly head-land of Devonshire.

Cornwall is almost an island, wholly surrounded by the sea, except where it is joined to the county of Devon, which boundary, from Morwinstow on the north, near the source of the Tamar, to the Ram-head on the south, forms a line of about forty-three miles. From this boundary to the westward, the land continually decreases in breadth, forming itself into a figure resembling a cornucopia; having the Bristol Channel on the north, and the British Channel on the south, both seas meeting, in a manner, in a point at the promontory called the Land's End, on the west.

From the widest part, extending from the northern point of Morwinstow to the Ram-head, the land decreases so rapidly, that for about one-third of the length of the county, from Padstow, on the north, to Fowey, on the south, it is only eighteen miles in breadth. Proceeding about another third, it is thirteen miles from Pendinas Casle, on the south, to Portreath, on the north; and from Mountsbay, on

B 2

the

* The county of Devon will be given in another Report, which will be separately printed. It was thought more advisable to begin with Cornwall, being at the extremity of the island.

** but by the nearest Road,
53 miles, & upwards.*

but as the country is very
hilly & much divided by
valleys, a traveller would
find the distance not less
than 100 Miles -

The π^o of acres would
also be more than arises
by computation of miles
on an horizontal surface

* So are the whole of the
Parishes of Werrington
& St. Peterwin near
Larinceton - yet the
county of Cornwall all may
be reckoned 800,000 acres

the south, to Saint Ives and the Bristol Channel, on the
north, the land is only five miles wide.

From Morwinstow, to the Land's End, the two most dis-
tant points, in a direction nearly south-west, and north-east,
Cornwall measures, by Martyn's map, seventy-eight miles
and a half. *

It contains nine hundreds, and two hundred and one parishes.

By an accurate mensuration, made from Martyn's ori-
ginal surveys, and obligingly communicated to me by his
nephew, the Reverend Mr. Hitchins, * the number of acres
are as follows :

Names of the Hundreds.	No. of Acres.	Land Tax.
Powder, - - -	128,115	- £. 6,003 7 0
Kerrier, - - -	89,051	- - 3,298 1 6
Penwith, - - -	90,957	- - 2,998 8 3
Pydre, - - -	92,713	- - 3,075 11 8
Trigg, - - -	54,574	- - 2,193 18 2
Lesnewth, - - -	61,132	- - 1,779 8 4
West, - - -	81,558	- - 3,741 2 11
East, - - -	112,647	- - 6,532 3 10
Stratton, - - -	48,934	- - 2,320 19 4
	<u>759,681</u>	<u>£. 31,943 1 0</u>

Part of the parishes
of Saint John, and
Maker, are in Devon,
therefore subtract - 1,197 †

Total, in Cornwall, 758,484 acres.

GENERAL CIRCUMSTANCES OF THE COUNTY.

The land of this county stretching itself out in the form
of the narrow peninsula we have endeavoured to describe,
is

* Mr. Hitchins intends to republish the Index Villarum of Martyn, a
work extremely useful in this part of the country.

† Mr. Martyn, who has accurately distinguished, in his Map, the Parishes
of St. John & Maker & Werrington & North Peterwin - to be in Devon -
surely did not include either of these Parishes in his computation
of number of acres (by the Hundreds) in Cornwall - and if not
included - why is the above deduction made ? -

is high and mountainous in the center, and declines towards the sea on each side.

On the sea shores and the vallies, near the banks of the great rivers, are the chief and almost only seats of cultivation. The higher grounds exhibit, in many parts, the appearance of a dreary waste. The roads of communication with the neighbouring country pass chiefly through these higher grounds, or large and extensive commons, and exhibit to the traveller a rude prospect which impresses him with a more unfavourable opinion of this county than it in general deserves. For although the higher lands have little to please the eye, the number and variety of beautiful and well wooded vallies, left me only to regret that the season in which I visited them did not allow me to enjoy their beauty in full perfection. While the strata of the rich and fertile soil, with which the lands of this county frequently abound, invited a more minute examination than my time could possibly afford.

Not only in the vallies, on the sea coasts and great rivers, but in almost all the low and flat grounds, in more inland situations, are to be found strata of marl, rich loams and clays, which, being alternately intermixed, and with poorer soils, afford an extensive field to the industry of the inhabitants of this county, and open resources for the cultivation of their waste lands, which afford reason to expect, under the patronage and enlightened views of improvement which may be afforded by the Board, effects of great importance to that country, and to the community at large.

Cornwall possesses the happy advantage of a numerous and public spirited body of gentlemen, who are alive to the improvement of their native county. The people of Cornwall also possess a great degree of perspicacity and acumen; they attend to new improvements: if they find them successful, they are not slow in imitation.

*Marl of an useful kind
for manures rarely found
in former all, & has not been
applied with any success
except by Mr. P. & the
last he exposed & incorpo-
rated can hardly be called
marl -*

SECT. II.

MINES.

† It has been remarked - that -
 & it is like lamented Mr. F. did not
 apply his Time, and Talents, more
 to agricultural Objects. &
 Considerations - and left to the
 Historical Description - Dutchy
 Lands + and Mines + of Cornwall -
 Since these Points might be found
 more at large - and read to as
 much Advantage, in the Pages
 of Porlase + Dodderidge +
 & price + from whence so much
 is borrowed - as seemingly required
 at least, some Acknowledgment.
 Since, without it, these 70 Pages -
 might have been reduced one half
 at least - and contained all that
 concerns Agriculture.

† 'tis to be hoped + not
 "more haste than good Speed"

† CONTEMPLATING the general circumstances re-
 specting this county, the mines with which it abounds, and
 to which so great a part of its capital and industry is di-
 rected, seem in the first instance to present themselves to in-
 vestigation.

Nor is this branch of employment unconnected with the
 agriculture of the country.

The adventuring spirit of digging into the bowels of the
 earth may be considered as counteracting, by the tempting
 hopes of sudden gain, the slower but more certain advan-
 tages of cultivating the soil.

In another view, an extensive market is by this species of
 industry afforded to the neighbouring husbandman, sup-
 plying, in that remote country, the want of great and popu-
 lous cities.

A further inquiry may be also instituted, and in many
 respects curious and interesting, whether the capital or stock
 employed in carrying on the mining business affords a pro-
 ductive revenue to the kingdom.

On a matter of such extensive discussion, it cannot be ex-
 pected that the result of my hasty observations can afford
 much satisfaction. Heads of inquiry it seems to be right
 to suggest. I shall only add a few cursory remarks, which
 may hereafter be much improved and extended by those
 more fully acquainted with subjects so highly interesting to
 that part of the kingdom: the produce of which species of
 industry, in ancient times, formed the chief staple articles in
 the commerce of Great Britain, and is at this moment of
 no small national importance.

The mines of Cornwall consist chiefly of tin, copper, and
 some lead. The strata in which these metals are found,
 extend from the Land's End, in Cornwall, in a direction from
 west

west to east, a very considerable distance into Devon, to the furthest part of the Dartmore Hills. These strata consist chiefly of the various species of the schistus, here called killas, and of the granite or growân. This extensive range forms the high ground in the middle of Cornwall, from which the winds, rain, and storms, have washed much of the vegetable earth to enrich the vallies, and in which they have been aided by the operations of the miners.

TIN MINES.

FORMERLY immense quantities of this metal were found in the county of Devon, and in the eastern part of Cornwall; and innumerable ancient workings are to be seen on Dartmore, and the adjoining country; and in the east of Cornwall. In Devon, of late years, several ancient works have been resumed, and some new discoveries made, of which we shall give some account in the survey of that county. In the eastern part of Cornwall some old works have been lately resumed on Hengston Down, and Linkinhorn parishes, which formerly produced considerable quantities of tin, and promise well to the present adventurers; but at present the chief seat of mining lies to the westward of St. Austle. From hence to the Land's End, the principal mines are to be found in various strata, extending along the northern coast, keeping a breadth of about seven miles.

Polgooth, the most considerable of the tin mines in the county, lies about one mile and a half west of St. Austle, and has produced, on an average, the last eight or nine years, about two thousand five hundred blocks per annum. This mine remains still as rich as ever. Some others there are working in this neighbourhood, but not of much consequence.

In the parish of St. Agnes, and its adjoining parish Peranzaboloë, there are a great number of mines, the joint produce of which is very great.

Kerwin.

* how much more would these high grounds lose if the present surface was pared & loosened, & tilled - may be worth consideration - previous to any scheme of improvement formed by a "Cursony" View - & hasty Remarks?

Kenwin, Kea, and Gwenap, afford considerable quantities of tin. In Gwenap is the mine called Poldice, very ancient and deep. It has yielded sometimes one thousand blocks yearly. It may now with more propriety be denominated a copper mine. In this, and many other tin mines, when they get to a great depth, the tin wears out, and leaves a lode or vein of copper.

Huel Virgin is another instance of this kind; but as it produces, at her greatest depth of one hundred and sixty fathoms, some tin mixed with copper, I have enumerated it amongst the former. In Redruth, from Huel Pever, a portion of Northdowns and some other parts of the parish, tin is produced. In this parish the ancient mine of Treleigh Wood, though long neglected, will probably be worked again. In Wendron, north-east of Helstone, the tin mines are numerous; and though not individually large, the ancient and present quantities are high. Between Helstone and Marazion, are the tin parishes of Sithney, Breague, Gerino, &c. &c.

Immediately beyond Penzance, is a tin mine worked under the sea. The shafts through which the miners go down to work, is situated nearly one hundred yards below highwater mark. During the greatest part of the flood and ebb tides, if the works were to give way, they would be exposed to inevitable destruction. Further westward from Penzance, there are only small scattered mines, until you come to St. Just, in which stands Cape Cornwall, one of the western promontories. In this there are several mines, the ancient and present produce of which is very considerable. North and north-east of Penzance, to St. Ive's Bay, are many mines, and generally much tin, but not at present so productive as of late years: from hence, little, until you reach St. Agnes again.

I have thus given a general view of the tin mines in the county. I shall also just enumerate the stream works, by

* Mr. Trevelyan must mean that the bottom of the shaft is so deep the entrance by which the miners first enter the work must be above high water mark. but being once so entered the working may be carried to any depth under the sea or whether with greater certainty a deep mine can be found from Springs or Water, than above the level of the sea because all rivers & drains tend to that level

by which is meant the operation of washing the soil in the vallies, which is found to contain tin in the form of small particles or grains, supposed to be the detritus or abraisions from the greater lodes, either at the first formation of the earth, or subsequent revolutions.

These are principally in the parishes of Lanlivery, Luxilvan, St. Blazy, St. Austle, St. Mewan, St. Stephens, St. Columb, St. Enoden, and Ladbroke, east and north-east of Truro, from five to twenty miles. The principal stream mine in the county is at Carnon, about half way between Truro and Penryn. West of this there are few stream mines.

All tin ores are brought into metal *in the county* in blocks of from two hundred and three quarters, to three hundred and three quarters each, which are carried to the different coinages held at four stated periods in the year, and not saleable until there passed and marked with the arms of the Dutchy by the officers appointed for that purpose under His Royal Highness the PRINCE OF WALES, to whom there is a duty paid of four shillings per hundred weight, on all tin so coined.

PRODUCE OF THE TIN MINES.

THE annual produce of tin for seven years, from 1786 to 1792 both inclusive, has been about 22,000 blocks, amounting nearly to 10l. 10s. per block, exclusive of duties, in the whole affording a produce of 330,000l.

From the stream ore is produced generally what is called grain tin, amounting to 5 or 600 blocks per quarter, and sometimes more. The superior price of this tin above the common tin at different times, has been from four to twelve per hundred weight.

Native gold has been found in some stream works, and also, but more minutely, blended in some mines of tin.

[Cor.]

c

COPPER

*+ Shillings it may be
supposed*

COPPER MINES.

OF these, I shall enumerate the principal and leading mines. In Gwenap, from two to three miles south of Redruth, and from seven, to eight or nine miles south-west from Truro, are the Consolidated Mines, United Mines, Poldice, Huel Unity, Huel Jewell, Tresavan, with some of lesser note.

In Redruth, and its vicinity North Downs, a consolidation of various old mines, in which the adventurers have sunk to this time much beyond 80,000l. with small prospect of its being returned. In this neighbourhood are some smaller mines.

In the parish of Illogan there is Cook's Kitchen, in the land of Sir Francis Basset, the most profitable mine in the county. During the last eight years, it has produced, after paying the costs, a clear profit of 80,000l. and is likely to be lasting, in which wish every one who has the pleasure of knowing the land-owner, must undoubtedly join. Near this are the mines of Tincroft, Cherry Garden, and some others. In Camborne, a little to the west of these, Straypink, Huel Gons, Camborne Vean, &c. In Gwinear, still west, are Hueland, Prince George, Huel Carpenter, &c. South from there, in Crowan, Huel Treasury, Crowan, and Oatfield, &c. From these a few miles westward are others, as Huel Leeds, Rettallack, Stalamonin, &c.

To these if we add Huel Musick, Huel Rock, &c. in St. Agnes, inconsiderable, and Gunmies Lake mine near Hengston Down, in the eastern part of the county, yielding about 20 tons of ore per month, I believe the list will comprehend all that are worth mentioning of the productive copper mines at present worked in the county.

**all three of them -*

PRODUCE

PRODUCE OF THE COPPER MINES.

THE produce of the whole of the copper mines amounts to about 40,000 tons of ore, yielding on an average about eleven three-fourths in the hundred, and consequently producing about 4,700 tons of copper. The greatest part of the copper ores are sent out of the county to be smelted, and the price is very variable; but taking the ore at 8l. per ton, the produce of the copper mines will amount annually to about 320,000l.

There are several old mines now unwrought, and which seem to carry a probability of being at some future period renewed. But it is necessary to observe, that many of the present are become so deep and expensive, that they cannot be expected to continue many years; and that it is likely the setting on of those supposed worth being renewed, may not take place until the present deepest and most expensive are given up.

LEAD MINES.

THERE are also some lead mines in different parts of the county, but they are not much worked at present, nor is their produce great, although the ores in general, I am informed, produce a pretty considerable proportion of silver. The principal are Huel Pool, and Huel Rose, near Helstone. A few small ones on the Bristol Channel, in Perran Cubert, &c. and on the same coast, north-east of Padstow, in Saint Minver, Saint Cue, and Endilion, in which last parish was also the most considerable mine of antimony which this county has produced.

IRON MINES.

OF iron ore there is abundance in many parts of the county, but there are no mines of this ore which have been much worked. Many tons have indeed been lately sent to Wales, which the proprietors say is so rich, that they have not been able to find out a proper flux for it. Probably the contents of the ore they have received, have not been sufficiently investigated.

GENERAL OBSERVATIONS ON THE BUSINESS OF MINING.

I FOUND it difficult to arrive at any very accurate estimate of the number of people employed in the mines of Cornwall. Some stating the number of men as high as 22,000, others not more than 8 or 9,000. Including the streamers, who are a distinct body from the miners, the number of men, women, and children, employed in raising the ore, washing, stamping, and carrying it, amount to about 16,000: of these there are from 12 to 14,000 men capable of bearing arms, who are as brave and hardy a race of men, and as much attached to the happy constitution under which they live, and the illustrious family on the British throne, as any description of individuals in the kingdom. *

I have

* From the miners having occasionally given interruptions to the peace of the county, people who are strangers to their dispositions, might be apt to conclude that they were not so loyal, or peaceable set of people. That is far, however, from being the case, their insurrections are almost uniformly on account of either the actual dearth of grain, or from the apprehensions of approaching scarcity. But although they have frequently, from the real pressure, but more often ill grounded apprehension of approaching want, behaved with unpardonable irregularity and violence, yet they have been found, on different occasions, ready to follow the gentlemen of the county to Plymouth,

I have stated the number of men capable of bearing arms in the mining district at 14,000. These men have better wages than any other labourers in England. They marry young, and have large families. In a narrow slip of barren country, where the purposes of agriculture would not employ above a few thousand people, the mines alone support a population of from between 50 and 60,000, exclusive of the artizans, tradesmen, and merchants in the towns of Saint Austle, Truro, Penryn, Falmouth, Redruth, Penzance, &c.

To this must be added the number of seamen carrying and recarrying the produce of the mines, the coals, hemp, powder, timber, iron, tallow for making candles, grain, flower, and the various other supplies to the mines, which altogether constitute the mining business a trade of great national importance.

The farmers also in the neighbourhood, and the more fertile districts to the eastward, have thereby a ready market for their produce, in affording great encouragement to agriculture, the want of which would be severely felt, if in so remote a country this demand was to be taken away by any sudden reverse in the prosperity of mining.

It has been remarked to me, by a gentleman of much discernment, and thoroughly acquainted with the county, as well as with most parts of England, "that there are more men who possess fortunes sprung from the mines, of five, and from that to twenty thousand pounds, than there are in any other county in England, excepting the metropolis and its vicinity, and there are some instances of individuals acquiring from fifty to two hundred thousand pounds from the mines and by a fortunate course of trade."

With

mouth, or such other places as their services were required for the defence of the country; and, I am persuaded, that if any such occasion should again present itself, they would be found equally ready to turn out, according to their motto, "one and all," in support of their Sovereign and their Country.

+ 19 to 1 says 8th Prize

With all these advantages derived from the mines, by adding to the force and wealth of the nation, it is a problem, with regard to the solution of which I found various opinions, whether, upon the whole, the produce of the mines pay for the capital stock, and labour expended upon them.

In general, the mining business is considered as a lottery, in which there are more blanks than prizes; but these prizes sometimes are so very high, that they excite people to adventure, without making any very accurate calculation of the probability of loss.

The highest prize I have heard of, was that of Huel Virgin in Gwenap.

In the first fortnight's working, it threw up copper which sold for 5,700 pounds; in the next three weeks and two days, as much copper as sold for 9,600 pounds. To raise the first mentioned quantity, the adventurers expended no more than one hundred pounds; to raise the second, a trifle more, in proportion to the quantity. This mine has been continued to be worked, with great profits to the land-owner and adventurers, for more than thirty years.*

* A very full account of the mines will be soon published in a new edition of the "Mineralogia Cornubiensis," by Mr. Bunnellack, a work which I would recommend to the patronage of the public. The Editor has had near fifty years practice in all the branches of mining, and will no doubt give much interesting information. Subscriptions are received for it, at Mr. Phillips's, bookseller, George Yard, Lombard-Street; and by Mr. Robson, of Bend-Street.

SECT.

SECT. III.

SOIL.

I. BLACK GROWAN SOIL.

SO great is the variety of soil in the county of Cornwall, that to describe it with correctness, would require an history of every parish. I shall just point out the general distinctive characters. Throughout the higher lands, almost generally the upper stratum of soil consists of a light black earth, intermixed with small gravel, the detritus of the granite or growan. Hence they call this soil by the name of *growan*. This soil, on the tops and sides of the mountains, is very shallow, and even on many of the more level and flat extensive wastes, of no great depth. Its natural produce is a thin short heath, and the dwarf or *Cornish furze*. Throughout the whole of the mining district, and in many parts of the eastern districts, it is the practice to pare the surface of these grounds, as a miserable substitute for fuel. Underneath this upper stratum there is generally to be found about seven or eight, sometimes not more than four or five inches of a stratum of a cubical quartz, of various sizes, and under this a whitish or yellowish loamy clay. By digging up the quartz, picking them off the ground, and afterwards intermixing the under strata of clayey loam with the growan earth, on the surface, a soil is produced of a very good quality, and fit for any sort of grain. The miners are encouraged by the gentlemen of the county to pursue this sort of cultivation, by allowing them as much as they chuse to cultivate of the wastes for a trifling quit-rent, and some of the gentlemen of the county, particularly Sir Francis Basset and Sir John St. Aubyn, have it in consideration to encourage this still further,

*On the highest Downs or
Hills no furze of any kind
will grow. for but scarce on
Kilgobbin, nor on Lannion or
Lannion.*

*† Is there any Furze peculiarly
Cornish? It may be proved
that the Labour used in preparing
and Carriage of this "miserable Subst."
for Fuel (as Mr. T. properly
calls it) would purchase Coals, or
Wood, to support larger, & better Fires.*

*It would be better for the publick -
if this wretched practice - not*

*peculiar to Cornwall, & Devon - but too
common in many Parts of England & and complained of by
Dean Swift, as a bad Practice, in his Time, in Ireland, -
were totally prohibited by an express Statute.*

*The Miners work by
Stems as it is called. That is
by reliefs every 4, 6 or more
hours under ground -*

** very different soils, and in different
situations too, are meant by the word
"Moor" in the Eastern and Western
parts of the County.*

*W. J. suggested some easy improvement
(at first sight) on the East of Stratford
Barton of Treverise - since effected
by draining and using the contents
of the drains, on the surface of the
other parts of the Moors described
by Mr. J. J.*

ther, by giving premiums to those who show their industry by this sort of cultivation.

To excite the miners to cultivate the soil, is highly worth attention, as they have much time on their hands, between the intervals of their going under ground, which is often not more than six, and at most eight hours out of the twenty-four. At present their leisure time is very much taken up in the summer in procuring fuel. The coasting duties on coals have been taken off for the use of the mines. If this indulgence were extended to the miners, it would have a good effect. A commutation for the duty might be easily made by an additional local duty upon the licences of all public houses, for retailing spirituous liquors, which might be adequate to the revenue derived from that duty, and easy in collection; which measure I beg leave to suggest to the gentlemen of the county of Cornwall.

In all these waste lands there are a great many shallow indented vallies, where for ages a collection of soil has been accumulating, inundated at present with water, or consisting of oozy bogs, carrying on their surface sedge or rushes.

By draining these moors, as they are called in Cornwall, it will be generally found, as I have seen in several particular instances, that the upper surface consists of a black earth formed into the more solid substance of a species of peat, a collection of vegetable earth which is burnt for fuel, by cutting it in the form of a brick and drying it, and the soil underneath, the rich collections or sediment from the mountains, and capable of being converted into fine meadows.

These two species of improvements, I apprehend, will one day be objects of general attention to the people of Cornwall.

Mr. Praed of Trevetho has, I believe, the undisputed merit of introducing these improvements on a large scale. By a skillful and judicious intermixture of soils, from which he has dug and picked out the cubical quartz, he has improved

The ploughing match of the Cornwall Agricultural Society at Liskeard, on the 18th inst. was very fully attended—12 ploughs started for the premiums, which were adjudged to John Volper, hind to D. C. Trelawney, Esq. best ploughman, 3l. 3s. his driver, 12s. 6d.—Robert Lane, servant to Mr. John Rogers, of Quethewick, 2d best, 2l. 2s. driver, 5s. Anthony Jane, servant to Mr. Henry Barrow, of St. Clear, 3d best, 1l. 1s. driver, 2s. 6d. Mr. Trelawney's double share, or skim plough, which won the best prize, promises to be of great utility in this county—being simple in its construction, and of little additional expence, beyond the common plough, strongly recommends it to the attention of farmers.

+ This Species of Soil is nearer of kin to
real Slate - which is found in these
Districts -

(26)

Mr. Trorer has entirely
omitted the Hundred of
Stratton & does not say
well or part of the hundred
of East, which are wholly
free of stones, & all employed
to rear cattle or produce
Corn - This the most
agricultural part of
Cornwall - possibly he
had not time to visit
these parts -

*x - In the north & as well as the
South Wheat precedes the barley -
tho. by this description one would
suppose Mr. T. thought otherwise -
+ their land in the north and west
nearly as well.

The Parishes of Melampour,
Poughill - Stratton -
Lamell - Marazion -
Bridgerule - Whitton -
Mary Meak - St. James -
Pensance & I. Guinys -
& others along the coast
contain very rich & productive
land in Corn as well as cattle -

In the eastern part of the county, there are two very fer-
tile districts which abound with this species of soil. One of
these districts is on the north, and the other on the south
side of the range of mountainous grounds we have de-
scribed.

The northern district is on the banks of the Alan and
Camel towards Padstow, and from thence west on the one
hand as far as the parish of Cuthbert, or on the other north-
east to Lanteglos. *

In the south, on the banks of Fowey, around Menabily,
the seat of Philip Rashleigh, Esq. from that river, extend-
ing eastward, skirting Bodmin Downs to Liskeard, Saint Ger-
man's, and to the banks of the Tamar, below Hengston,
this soil prevails, stratified in many places with reddish and
hazle loams.

These two districts are very fertile. The northern pro-
duces immense crops of barley, and may be justly called the
Granary of Cornwall. It is from thence, the miners of the
west are chiefly supplied with that grain. On the south,
plentiful crops of wheat as well as barley are produced. They
grow wheat in the northern district, but in the south they
have the advantage of procuring lime from Plymouth, which
would be very expensive in the north: this they use as a pre-
paration for wheat.

Besides these two districts, is a very rich tract of land on
the banks of the river Fal, around Tregothnan, the beauti-
ful seat of Lord Falmouth, extending to Grampound and
Trewithen, the seat of Sir Christopher Hawkins, &c. round
by Tregony to Roseland. Another district of excellent fer-
tility is to be found on the river Hel, around Trelowaren,
the seat of Sir Cary Vivyan, Anthony, St. Kevran, &c. to-
wards the Lizard Point.

In the hundred of Stratton, on the north-east of the
county, around the town of Stratton, and towards Morwin-
stow, there is a district of good land, although the greatest
part of this hundred consists of waste and boggy land. To-
wards

wards Penzance also, on the south-west, there is some land which produces very large crops of potatoes and grain.

In general, the more internal parts are only cultivated in patches, and these surrounded by uncultivated wastes and commons. The most remarkable of which are those extending from near Launceston, almost to Bodmin, and to the south and south-east of this borough. In the parish of Saint Agnes, and the neighbouring mining parishes in the west, there are extensive tracts of waste lands. On the south, towards the Lizard, there is also an extensive tract of waste, called GONHILLY DOWNS.

We shall endeavour hereafter to state, with as much accuracy as we are able, the extent of waste and cultivated land in this county; but the proportion of the former is obviously very great indeed, and that not of waste lands incapable of cultivation, but of lands, in point of soil, climate, and opportunity of procuring manure, extremely favourable for cultivation.† But such is the propensity to adventure in digging into the bowels of the earth, in the hope of acquiring sudden riches, that agriculture is considered only as a secondary pursuit. In consequence of which, the western hundreds of Penwith, Kerrier, Poudre, and the western parts of Pydre, do not afford a supply of corn sufficient for their inhabitants. In the eastern districts which we have mentioned above, around Padstow on the north, and St. German's on the south, and adjacent to the Alan and the Fowey, there is a greater quantity of grain raised than is sufficient for the inhabitants, and by many supposed equal to the consumption of those in the less fertile districts. The farmers however, in these cultivated districts, find it more convenient to sell their wheat and barley to the merchants who export grain, than to carry them to the markets in the western part of the county.*

From this circumstance, it happens sometimes, that the markets in the western parts amongst the mining districts are ill supplied with grain, particularly barley; and on such oc-

+ 2:~

* This proves that grain is so much cheaper in Cornwall than in some other counties that it will bear the charge of exportation & the merchants profit. Consequently the inhabitants of Lancashire or other counties have more reason to complain than the inhabitants of Cornwall.

asions it has often happened, that the tanners have risen in great bodies, and proceeded to the places of exportation, with a view of deterring the merchants from exporting grain. These shameful and illegal infractions of the peace of the county, have for some time become almost annual. By the influence of the gentlemen of the county, who have always come forward to their aid, in case of any real scarcity, and by the exertions of others more immediately connected with the miners, I was glad to find, that they were sensible of the impropriety of this conduct, which, like all other illegal violence, not only exposes the aggressors to the just severity of the law, but defeats the very purpose they intend thereby to effect, by making the farmer accelerate the exportation, and rendering him afraid to bring his grain to the country markets from the fear of being plundered, or made to sell it at an under price.

On the whole, Cornwall, populous as it is in the mining districts and along the sea coasts, yet if agriculture was more attended to, there can be no doubt that it would supply subsistence for a much greater population than it actually possesses. The sea affords ample supplies of a variety of fish, potatoes grow no where in greater plenty, or of better quality; by further exertions of industry in cultivating their lands, it will be obvious to any one who views that county, that they may produce grain of all kinds in great abundance; and it is to be hoped, that we shall soon hear no more of complaints of scarcity, or approaching famine, in a country where nature has bestowed so much, and man done so little.

*Mr. Frazer notices the Socy of Agriculture
in page 35.*

SECT.

SECT. IV.

CLIMATE.

THE sea, being of itself always of the same temperature, has a tendency to assimilate the same quality to air passing over it. Hence arises the temperature of island situations. Of the advantages and disadvantages of such circumstances, Cornwall, so nearly approaching to an island, must in a great measure partake. Hence in Cornwall, the air is milder in winter than in the more internal parts of England, and cooler in the summer months. From its being open to the vast Atlantic ocean, without the intervention of any land almost to the coast of America, it receives the whole force of the south-west winds, which are remarked to blow, in general, throughout Great Britain four-fifths of the year.

—————Madidis Notus evolat alis
 Terribilem picea testus caligine vultum
 Barba gravis nimbis, canis fluit unda capillis
 Fronte sedent nebulae rorant pennaeque sinusque.

This character which the south wind has had in all ages, it preserves in full force in Cornwall. The air is thereby more full of moisture, and frequently subject to fogs, but they are not unhealthy. Ray-grass is earlier than in more internal parts of the kingdom: the winters very open, last winter for the only time these five years were the gentlemen able to procure ice to fill their ice-houses. From the prevalence of the south-west winds also, it is very difficult to raise plantations of trees in exposed situations; and it is only in sheltered vales where any remains of the ancient natural woods are to be found, although there is no doubt that this county, as well as the greatest part of all continents and islands, has originally been covered with wood. Myrtles grow every where in the open air, without the aid of green-houses, both in this county and Devonshire, particularly on the

* South West rather -
 not direct South

+ The Trees on Elevated Places
 on the North East Coast of
 Cornwall are shorn smooth
 over the Tops by the West. &
 North West Winds only - - -

+ W. J. finds the Indian
Corn thrives here - with
little care - or culture -

the southern coasts. Many other tender green-house plants are to be seen in the open air, in the gardens of the curious. The President of the Board has very properly recommended, from these circumstances, the trial of the Guinea grass.—
Others may also be found of great importance, which will not bear the winter cold, and sudden changes of temperature in other counties. *

SECT. V.

THE MANNER IN WHICH THE LAND IS POSSESSED.

FOR the better understanding this part of my inquiry, it is necessary to observe, that in ancient times the whole of the lands both in Devon and Cornwall, consisting of the mountainous waste and moory lands above described, in which tin was found, belonged to the King; the revenues arising from which, and from the coinage of tin, formed a very considerable part of the revenues of the Crown. This territory was anciently reputed a Dutchy, but a little before the Norman Conquest was an earldom. By Edward the Third it was a-new constituted a dutchy; the first that was erected in England after the Conquest, and conferred on Edward the Black Prince, with the special limitation to the first begotten sons, and heirs apparent, of him and his heirs, Kings of England, for ever.

A very great part of these wastes and moors still are parcel of the said dutchy, to which also other manors, lands, and hereditaments have been added by subsequent acts of parliament, in lieu of other lands in other counties, taken from the same by act of parliament, with the obvious intention of preserving the value of the dutchy entire.

The dutchy lands are still by far the most extensive of those belonging to any proprietor in the county. The lands of the other proprietors are very much intermixed with the dutchy lands, and with each other. Property is very much divided; there are very few who possess, of landed rental within the county, more than 3000l. per annum, exclusive of under ground profits.

From the limited power which His Royal Highness the PRINCE of WALES possesses of granting these dutchy lands for the purposes of improvement by cultivation, and from undefined claims to common, a great and valuable part of this county is very much locked up from public improvement: to propose some remedy for which is an important object for the consideration of the Board, and which we shall treat of in a separate section.

With regard to the manner in which the lands are occupied, the farms are in general very small. In the eastern and more fertile parts, rents, in general, do not exceed thirty or forty pounds per annum; the greater part not above ten or fifteen pounds per annum; some few are as high as 100l. and from that to 200l. per annum. All the farms are generally on leases of lives. In the western and mining districts they are very small indeed, chiefly cottage holdings.

x x *Even so*

*... some very much getting
out of practice*

HUSBANDRY:

" THE art of husbandry was little practised in Cornwall; two centuries ago; their grounds lay all in common, or only divided by stiche meale, and their bread corn very little; their labour horses were only shod before, and the people devoting themselves entirely to tin, their neighbours in Devonshire and Somersetshire hired their pastures at a rent, and stored them with cattle they brought with them from their own homes.

+ 2: ~

homes, and made their profit of the Cornish, by cattle fed at their own doors: the same persons also supplied them at their markets with many hundred quarters of corn, and horse loads of bread."* †

"This was a very disadvantageous state of the commerce of this county, for the products of the tin will always be fluctuating and precarious; but the necessity of flesh and corn is perpetual, and the returns from husbandry properly managed, annual, regular, and constant. People therefore increasing, and the mines sometimes failing, the Cornish felt the necessity of applying themselves to husbandry; there being no trades (says the judicious Mr. Carew), which set so many hands to work at all times of the year, as that one of tillage.

"Their improvements answered their expectations, and in the latter end of the reign of Queen Elizabeth, the Cornish found themselves in a capacity not only to support themselves, but to export a great deal of corn to Spain and other foreign parts. Cultivation has been advancing ever since; and better fenced and more profitable inclosures for the plough are no where to be seen, than on the banks of our greatest rivers, Tamar, Alan, Faland, Fawy, and the sea-coasts of our harbours can shew."†

This interesting account of the progress of cultivation in this county, ought to excite the people to farther improvements; for, notwithstanding the worthy historian's partiality to the improvement of his native county, it must be confessed, that either agriculture has decayed, or that the population of the county has increased much beyond the advancement in the improvement of their lands, as Cornwall cannot boast of such an estimate of produce as was made in the days of Cambden.‡

agriculture & population, have both fluctuated much (as W. J. can prove) since 2: Eliz. reign - in the north east part at least, of this County - but both are (probably) at this time higher than ever. ~

The

* Car. page 19, &c.

† Borlase's Nat. Hist. page 84.

‡ Eng. page 6.

The management of the land is uniform; here and there an exception will be found. The whole is convertible, sometimes into arable, and sometimes pasture. Arable is sown with wheat, barley, or oats, as long as it will bear any; and then grass for eight or ten years, until the land is recovered, and capable again of bearing corn. There are many instances of what is called furze crofts, where they are so run out by this management, that they do not recover themselves more than once in a generation.

The process they pursue is, in general, by paring and burning the surface of the ground. The land is then dressed with the ashes, and a compost of sea sand, earth, and the scrapings of lanes, in which they throw straw to collect the soil and moisture: to this they add the dung which they save in the farm yard, or which they purchase from the adjacent towns.

Their chief dependence is on the sea sand, which is fetched on horses backs, or on mules, as is almost every where the mode of carriage, both in Devon and Cornwall, of which they use from eighty to two hundred horse loads per acre, according to their distance from the sea coast.

The common use of this manure is preparatory to a wheat crop; the seed being chopped in with a mattock. This is succeeded by one, and frequently by two crops of barley or oats; with the last of which grass seeds are sown, which are, rye-grass or *iver*, trefoil, and Dutch clover.

The best farmers take only one crop of barley after wheat, and lay down with grass seeds, which they dress with dung and earth, and after four years break up again; but in general, with all those lands that are at a distance from their farm-yards, they pursue the same negligent mode above described. They sow them with oats, or barley, as often as they think it will pay the expence of the tillage; and very often, when they have little more than the seed returned, which so impoverishes the land that it cannot be

[Cor.]

E

broke

* generally three crops
seldom more than three
barley & oats with flowers

* or lime

that is very seldom the
case rarely in soft boggy
spots. the land is generally
plowed - but when the
surface is to be burnt it
is downsheared, or as they
call it beat-hacked with
a mattock.

+ when the ground is often tilled
the earth is removed from the roots
of grass & - and very little besides
that is burnt & on cold moors
(long out tillage) it is absolutely useful
to burn the earth also -
- Experience, versus, Frager!

* There is no keeping
down the natural grass
without it - order being
the strong roots of weeds
in the ground it is certainly
necessary & useful in
most parts of Devonshire

+ 2: running out
If the ground remains in Furze and
brambles for 25 or 30 years (as above stated)
- how is it run out? - surely this is best.
Enough.

+ chiefly the latter.

- + + and yet the use of carts are, in another place, recommended
(page 36, by Mr. F. ...)

broke up again to any advantage, but remains in furze and
brambles for twenty-five or thirty years, reducing it to a dry
gritty substance, little more than a caput mortuum. +

While truth demands that I must state this process as the
general routine of managing the land in the county of
Cornwall, it is also but justice to state, that there are many
who pursue a liberal and enlightened course of husbandry,
and instead of running out the land in the mode I have
described, perceive the advantages arising from supplying
it with proper manure, and introducing green crops between
the crops of grain.

Turnips are by the best farmers sown after wheat, for
which they commonly manure with dung and sea sand,
afterwards lay down with barley and grass seeds. Paring
and burning is very generally, amongst those who are re-
puted the best farmers, stigmatised as a barbarous practice; *
and they allege, that they find it much better to use the
plough alone.

In Devonshire, however, this practice has been continued
with advantage for these three hundred years; and I am
inclined to think, that it is only the injudicious mode of
paring and burning, and the running out the ground after-
wards by too frequent cropping, that has given rise to a
reprobation of a practice, which, under proper management,
is well suited to the nature of a soil uncommonly over-run
with weeds and wild plants, which cannot easily be destroyed
by any other mode.

PLOUGHS AND IMPLEMENTS OF HUSBANDRY.

Horses and oxen⁺ are generally both used for the plough,
throughout this county as well as Devon. The country
very hilly, ⁺ not admitting the use of carts, the horses are
wanted for some carriage or another, and are almost always

under

under the pack-saddle. The plough team is sometimes four oxen, and sometimes only two, with always one or two horses as leaders before the oxen, with a man or boy to drive them. The plough commonly used is extremely awkward and inconvenient. The Suffolk plough, with two horses, without a driver, is used at Trelawn and some other places, and performs double the work, and at much less expence than the common Cornish plough. But the farmers will not be persuaded to adopt it. The double furrowed plough has also lately been introduced, and answers extremely well on level fields. The ploughing matches, instituted by the Society of Agriculture, for the formation of which the county is highly indebted to Sir William Molesworth, are well calculated to raise an emulation among the farmers in this essential article of agricultural management, in which they are in general in this county very deficient. It would be well if the Society, or the gentlemen of the country, were to get a number of the Suffolk ploughs, or the Kentish turnwrist ploughs, and induce the farmers, by little premiums, to use them: they would soon find the benefit of them by saving both time and labour.

In the western part of Cornwall they use an immensely large plough, for turning up the quartz stones which lie under the upper surface of the ground. Mr. Pread, of Treveho, has a team of six or eight oxen for this purpose; Sir John Saint Aubyn, a team of fourteen oxen and seven horses, with which he ploughs to the depth of twenty and sometimes twenty-two inches.

This had certainly much better be done by two separate instruments; one for cutting the root of the furze, and loosening the quartz stones, and afterwards a plough to turn up the soil and stones. This operation, however, would be still more effectually done by hacking and trenching; and would be in this way, in a country where, like Cornwall, there are abundance of hands accustomed to this

* The plough share for paring the ground, called the velling share, is peculiar and necessary to this purpose. The other plough may, no doubt, be improved upon.

* Each Waggon & Mains
are in use with horses &
Oxen or both in all the
Northern & Eastern parts
of Cornwall from the south
upwards -

+ not so few as ^{from} one hundred
and fifty ²⁵⁰ per Day - Waggon &
Carts - used ~~in the~~ in the
Carriage of sand for manure
at the Landing places of
Pound & Widesmouth only,
during most of the Season -
and these places are within
one mile (or less) of each
other.

sort of labour, performed cheaper on the whole, as it would thereby be done most effectually.

This very mode is every where pursued by the miners in cultivating their little crofts. Mr. Grosette, an intelligent farmer in the neighbourhood of Truro, has introduced the Yorkshire schim, with an improvement of his own, which throws up the weeds and levels the ground with great expedition; and several gentlemen are adopting it. The whole of the economy at this farm is admirable, simple, and intelligent, and deserves to be attended to by every one in the county who is ambitious of improving the system of farming commonly practised. ~~Carts are not used~~ either in Devon or Cornwall; every thing is carried on horse's backs, or on mules. The Irish car, I should apprehend, would be a great improvement to the husbandry of these counties. In the north of Ireland, where ground is as hilly as in most parts of Cornwall and Devon, a single horse will draw half a ton with great ease, which is more than three of the Cornish horses carry on their backs. These Irish horses are, however, a much better and larger breed, and excellent in draft. In Cornwall they keep vast numbers of little horses and mules, which, when their work is over, they turn into the common, or into fields already eaten almost bare by other cattle; so that they are at little or no expence in keeping. They cannot be induced to try other modes of carriage. It must be remarked also, that the ascents from the sea shore, from which they bring sand and ore weed, are frequently extremely steep.

MANURE, LIME, ORE WEED, SEA SAND, PILCHARD SALT,
AND DUNG.

In the eastern part of Cornwall, near the sea, and the rivers, they bring lime-stone from Plymouth, which they burn

burn with culm from Wales, and use each as a preparation for wheat. Afterwards the best farmers use a compost of sea sand, pilchard salt, dung, and the rotten slaty earth, as a preparation for turnips; afterwards lay down with barley, for grass seeds. They use from eighty to one hundred bushels of lime, and from one hundred and fifty to two hundred horse seams of compost.

The manure produced from the bruised and decayed pilchards, and the Bay salt already used in curing the pilchards, and declared by the salt-officers unfit for farther use, is purchased by the farmers, and, consisting of oil, salt, and putrified fish, is a most excellent dressing for land. It is purchased from eight-pence to one shilling the bushel, consisting of two Winchester, or sixteen gallons.

This is the best of all manures, and the cheapest, as it goes farther than any other; is lighter in carriage, and lasts very long. It is mixed like lime, with earth sand, in various proportions, as it is easy or difficult to be procured, from forty to sixty Winchester, to one hundred and fifty or two hundred seams of sand and earth; it is left to ferment and incorporate with the sand and earth, and the whole frequently turned over and mixed, before it is laid on the land.

FERTILITY AND PRODUCE.

AFTER a dressing of this kind for barley, on some lands near the Lizard, I have been assured that ninety bushels of barley, Winchester measure, have been produced on an acre, statute measure; and that it is not uncommon to have from seventy to eighty bushels; seventy-five bushels they consider as a middling crop. Such a surprising fertility may, perhaps, hardly be credited, but it is supported by undoubted authority. Although there are not many districts equal to this, yet there are some other extensive tracts extremely fertile. In the district

*Some of the manures
here described are used
in few places only —
the general manure
of the county of
Cornwall is Sea
Sand (for the greater
part) — and Lime.*

of forty

22. *22*
 trict we have formerly described as extending from Cubert to Padstow, and from thence to Lanteglos by Camelford, the land is so wonderfully fertile, that with the common dressing of sea sand, earth, and dung, they first sow wheat, and then barley, without any fallow or intermediate crop, with which crop of barley they sow grass seeds as before mentioned, which they cut for hay next year; and after leaving it one year at rest, repeat this practice perpetually. Yet even with this management, they get of wheat from 24 to 30 and 35 Winchester bushels per acre, statute measure; and from 30 to 45 bushels of barley. †

POTATOES.

TOWARDS the western part of Cornwall, about Penzance, &c. they produce two crops of potatoes in a year: they plant the kidney potatoe about Christmas or a few weeks before it, which they draw in May, and plant in the same ground the apple potatoe. Captain James, of Morazion, assured me, that two years ago, he had by this management in the first crop from one acre, 100 Cornish bushels of twenty-four gallons each, and in the second crop 200 bushels; so that from one acre Cornish, which is one acre and one eighth statute measure, he produced 900 Winchester bushels of potatoes in one year. The manure they use, is sea sand ore-weed and dung. This mode of forcing crops of potatoes is certainly not to be generally recommended. By the common mode of planting potatoes in the end of April and beginning of May, after paring and burning, 450, and from that to 600 Winchesters, are no uncommon produce. This aptitude of the soil and climate in this part of the kingdom to this plant is easily accounted for. The summers are here always moist, and the ground warm and dry. The western isles of Scotland are fully as moist, if not more so than the county of Cornwall, or the western parts of Ireland. I have seen in the

isles of Canna and Tiree most excellent crops of potatoes with the same kind of dressing as is practised in Cornwall. These islands are, however, comparatively much colder than Cornwall, and yet their produce in the article of potatoes is greatly superior to the inland part of Scotland in the same latitude. The produce of potatoes in the west of Ireland is also known to be extremely abundant.

In these particular isles of the Hebrides which I have mentioned, it must be remarked, that the soil itself is dry and porous, containing a great mixture of sea or shell sand, and is very much of the same nature as the soil about Penzance and other parts of the west of Cornwall, all which goes to prove the propriety of cultivating potatoes in situations where the soil is dry and the climate moist.

If Ceres was deified amongst the ancients for the introduction of corn, surely Sir Walter Raleigh deserves the highest veneration in modern times, as the greatest benefactor of mankind by the introduction of potatoes, which has certainly rendered the subsistence of the poor in these kingdoms more easy, and of course added more to population than the inventions of all the statesmen that ever existed upon earth. Dr. Smith, in his excellent book of the Wealth of Nations, places the advantages arising to these kingdoms from the introduction of this valuable plant in a very strong point of view, and prefers it, as an agreeable food for mankind, to any other species of grain, excepting wheat, to which perhaps it is almost equal in point of nourishment. And he very justly observes, that if we look to facts, we find they will bear us out in the opinion of the excellence of this plant as a food for mankind; for he adds, that the strongest men,* and the most beautiful women in the three kingdoms, are to be found in Ireland, where the principal food is certainly the potatoe.

With all the advantages which this plant possesses as a food, and its easy culture and steady and prolific produce, it would undoubtedly be cultivated in preference to all sorts of grain,

* 2: + Beef & Mutton, which seldom fall to the lot of the Irish Labourer (at home) - must add somewhat to the strength of the English Husbandman - and is as great an Improvement, in this Point, upon potatoes only - as a Shirt is upon a Ruffe -

*This assertion should
be well founded before
it subjects the Doctor
to such imputation*

*great Quantities are grown
in the West of Devon and North
East of Cornwall - and in the
markets of Holsworthy and
Stratton, have not equalled in
price. ~~any other~~ for 7 years
past four Shillings for the
bag of 10 Gallons - at
Launceston - nearly the same -
often have they been sold at half the Price -*

grain, were it not for this circumstance, that it cannot be kept from perishing like grain, and must be consumed within the year. It is therefore to be wished, that Dr. Cuthbert Gordon, who, in the year 1786, produced, at a highly respectable meeting of the Subscribers to the British Society for extending the Fisheries and improving the Sea Coasts, a specimen of flour or meal, that keeps sound for any length of time, (being impervious to the air) made of potatoes, which, together with the bread made thereof, is grateful to the taste, a wholesome and nutritious food, and in all respects much to the satisfaction of every one present, would be prevailed upon to communicate the secret to the public. It then indeed was understood, that he generously intended to communicate this much longed for *arcanum* to the Society, for the use of their intended settlements in the Highlands. May it not be asked, for what reason should it be so long delayed? A promise, made in the presence of so respectable a meeting of noblemen and gentlemen, it becomes the credit of Dr. Gordon's genius, no less than the generosity which prompted the promise, that performance should follow at no mighty distance.—Perhaps the Doctor may remind us of the condition of the promise, a public remuneration for his other beneficial discoveries, which, we are sorry to understand, has not yet taken place.

Potatoes being principally used as food for man, it returns little to the earth, and becomes in some degree like grain, an exhauster of the land. It is also bulky and heavy in carriage, for these reasons the people in Cornwall grow only small quantities, in order to supply themselves and the nearest markets; and the price of potatoes in Cornwall, last winter, was more than double the price in Cheshire, where certainly manure is not more easily to be had, and the demand of the markets is much greater. This very greatness of the demand is perhaps the actual cause of the cheapness of potatoes in Cheshire. It is also owing to another cause, to which it is highly

(may show at 18 pence)

to the Loss of the Cultivator

highly important that the people of Cornwall should attend—it is the great advantage of potatoes ^{as a food for cattle}. By using them for this purpose, either for fattening bullocks, sheep, or hogs, or for feeding working horses or cattle, for all of which purposes they are excellent, the farmer can never fear having any waste upon his hands, and can therefore afford to supply the neighbouring markets at a much less price than where they are obliged to calculate upon the chance of waste by the article laying on their hands; and consequently from the nature of it not being capable of being stored over to another year, a great part must be lost. The use of the potatoe generally, in some parts of this kingdom, as a food for man, is still within the memory of many now living, and its use as a food for cattle is still very recent. The introduction of it as food for cattle is also important, as by this means a part of the produce is returned in dung to the farm, which prevents the crop from impoverishing the land. Lately, potatoes have been tried in all ways, raw, boiled, and steamed, and used as food for cattle, horses, sheep, and pigs. Mr. Billingsley has published in the Transactions of the Bath Agricultural Society a most ingenious and elaborate set of experiments on fattening pigs with potatoes, which are highly deserving attention. Mr. Crook, of Tytherton in North Wiltshire, is making experiments on a large scale for fattening oxen; and he informs me, that the result has been highly satisfactory. He dresses them with steam in a very simple and easy manner, and with very little expence. He takes a vessel fitted to the size of his boiler; one that is generally made use of for heating water for washing, is sufficiently large, holding about eight or ten gallons of water. In the bottom of this steamer there are a number of holes about the size of a common auger, which allow the steam to pass through the potatoes with which the boiler is filled, the bottom, where it rests on the mouth of the boiler, being made tight with a wet cloth to secure the steam from escaping. The steamer, for ease in emptying and filling

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does

It has not yet properly answered the cost of feeding cattle on them in the few parts of Devon where it has been tried which I fear may be owing to the ^{too} much manual labour in the tillage of these and in the taking up from the ground. Potatoes have not the cost of tillage best where (on a wheat stubble) these have been ploughed in and out of the earth. At the prices I have mentioned the feeding of Hogs—We would answer that is not (as Mr. B. has observed) sufficiently practiced here in the practice increases—

does not hold more than from one to two bushels. The potatoes are quickly dressed, and the water draining from these, supplies the exhausting of the steam. They are then overturned into a cooler, and more put in their place. The potatoes are afterwards mixed with chopped hay and straw.—The cattle are kept in houses or sheds, and furnished with this food without any addition of corn.

The only question is, whether they can be produced cheap enough to pay for this mode of management. Mr. Billingsley and Mr. Crook both decidedly prefer them to turnips. They have this advantage, that they can be taken up in time for wheat, for which they are an excellent preparation; they also will keep much longer in the spring than turnips, by being pitted in the common way practised in Cornwall, where the frosts are so light, that they require very little trouble in storing them.

Mr. Crook is also of opinion, that they may be raised with various manures, easily procured, and not hitherto much used for that purpose. The Hon. Mr. Justice Buller is just now trying, by Mr. Crook's advice, to grow potatoes on the forest of Dartmore with peat, as a substitute for manure, intermixing therewith the gravelly substrata to be found on that kind of land; and this, and various other spirited experiments of the learned Judge, I have no doubt will be attended with success, and lead to new modes of improving that waste, and the other extensive wastes of both these counties. Ore-weed alone is an excellent manure for potatoes, as I have seen tried in the Isle of Man: and as in many parts of Cornwall they have abundance of ore weed and sea sand, taking with it the favourable circumstances of soil and climate for the growth of this plant, it appears very important that they should endeavour to introduce potatoes as a farming crop on a large scale, and it is to be hoped that we shall see some spirited exertions for that purpose.

TURNIPS.

+ a large circular Hole dug in the Earth—then filled with Potatoes (in October or November) the Earth thrown up covers these in a conical form—and over this is placed a coat of thatch, extending beyond the sides of the Pit—and excluding the Rain &c. Yet for several years past the Potatoes in Cornwall, remaining when tilled—and taken up occasionally—as used—have suffered nothing from Frost—or otherwise + I conceive a better method, than “the Cavern”—is to place the potatoes in a dry House on a small quantity of wood ashes—a little straw scattered between each six inches deep of the whole heap—taking care to keep these dry—and that the whole quantity does not exceed 3 Feet in Depth.

+ answers well for Cabbages also—covering the ground with it, preserves the roots of plants from Frost in winter—from the sudden Drought of March winds—and from many Insects, in Summer + The Ore Weed is long in decaying

TURNIPS.

I HAVE already mentioned, that in some parts of the county turnips are introduced as a rotation crop. The practice, both here and in Devon, is to feed them off, or draw them upon lay ground, to be there fed upon by cattle or sheep, so as to have the ground ready to be tilled by Candlemas for barley. The practice, however, in Cornwall, of making turnips a rotation crop, is by no means general. It is in fact only practised by gentlemen farmers and the superior class of yeomanry; and by them the turnip husbandry is very ill managed indeed. The great use of turnips is as a substitute for a fallow, to clear the ground from weeds, and therefore they ought to be drilled and hoed with great care. Instead of this, they neither drill nor hoe their turnips; so that it frequently happens, that the couch grass is so luxuriant that it entirely covers the turnips, and it would not be supposed at a distance that there was a single turnip in the field. Where they are otherwise treated, kept clear of weeds, by being well hoed, they grow to an immense size, and certainly are a most excellent preparation for barley. In Cornwall, fallowing is never practised by the farmers, and therefore their grounds are uncommonly full of weeds. It seems astonishing, that it is so difficult to persuade them that their land would grow more corn in proportion to the destruction of the weeds, and that even a fallow would pay well for the time in which the land was in that state, by the great abundance of next year's crop.

Men of superior wisdom, observing the absolute sway with which prejudice seems to govern the rustic practice of an art which is capable of receiving so much aid from science, are very apt to lose their tempers, and to consider the tenacious observance of accustomed practices a proof of the want of understanding. Those who have attentively

+ these Things are so

considered the characters of that class of men, will be satisfied that their aversion to try new improvements in agriculture, does not arise from any peculiar deficiency in good sense or acuteness, but much more from these improvements not being clear, obvious, and so laid down, as to enable them to pursue them without too great a risk of capital and produce. Instead, therefore, of treating the peasantry with invective and contempt, I shall beg leave to make use of the language of the amiable Latin poet:

—————Quicquid eris
Da facile cursum; atque audacibus adnue cæptis
Ignarosque viæ mecum miserere agrestes
Ingredere, et votis jam nunc assuesce vocari.

SECT. VI.

GRASS LANDS.

WATER MEADOWS, which are found so great and valuable an improvement, are scarcely known in Cornwall to the farmers. Several of the gentlemen have lately begun to shew examples of this species of improvement. Sir William Molesworth has watered at Pencarrow about forty acres, which have answered exceedingly well. Sir Harry Trelawney has watered some fields at Trelawn, and is increasing this management upon this farm, which is one of the best improved of any in the county. Several other gentlemen are beginning this practice; but there is, upon the whole, very little land watered in this mode in the county.

The grass land they keep for hay is generally dressed with dung mixed with sea sand, or with dung alone, if they can procure it. They do not practise folding the sheep, which is found in other counties so excellent a mode of ma-

* always marked where they have proper water & means of flooding. all sorts of water will not answer

+ more than Sir F. is aware of — and yet (as he properly observes) not enough.

manuring the land; and this, although they are kept on the driest lands, where such a practice would answer extremely well. Their grass lands are also pastured by their working oxen, their carriage horses, milch cows, and young stock.

CATTLE.

THEIR cattle are chiefly of the North of Devon kind. Although the breed is not kept up in its greatest perfection, yet they are very much in request, and are sold off in great numbers for fattening. Their milch cows are therefore kept chiefly for the sake of rearing young stock, the dairy being very little attended to. On account of the wetness of the land, and the necessity of dung to mix with the sand for manure, all their cattle are housed in winter, and kept chiefly with straw. The buildings are on this account numerous in every farm. They are chiefly of cob walls, made with a mixture of clay and loam, and chopped straw, and called in other countries mud walls. These being of a mouldering perishable nature, are necessarily built on a foundation of stone, and require to be kept dry at top, or else they very soon go to decay. Some of the buildings are covered with slate, but by far the greatest part with straw.

Sir Harry Trelawney, a good many years ago, procured some of Mr. Bakewell's breed of cattle, of the long-horned kind; they answered pretty well with him; but neither his own people, nor the farmers in the neighbourhood, could be induced to attend to them. He has changed them for the North Devon breed, but has kept one cow which he had from Mr. Bakewell, and is now about twelve years old, but is always in good condition. Mr. Bakewell shewed his candour to Sir Harry Trelawney, by telling him, it was very unnecessary to come so far for his cattle, when he had

the Land may be dry enough - but folding would fix the Sheep to spots exposed to our peculiar Storms from the Western Ocean - which it is better they should be at liberty to seek Shelter. If Mr. T. had ever been present at a Shipwreck on this Coast - He would better have known the Value of Shelter for Man or Beast. -

** Much butter is made of Cream from scalded Milk - called clouted or clotted Cream -*

** These cob Walls is well built of materials duly incorporated & kept dry will last 60 to 100 years There are some at Hatherly in Devon of the reddest clay - small stones of great antiquity -*

+ scarce four.

so good a breed as the North Devon so near him. The best of that breed are certainly a most excellent stock, either for rearing or fattening. They have a small sort of cattle on the commons, and in many other parts, which they call the Cornish breed, which, when fat, do not exceed five or six hundred weight. They are too large boned for their size, and coarse shouldered. The best Scotch Highland breeds would answer much better. It is, however, difficult to get them of the best sorts.

HORSES, &c. FOR CARRIAGE.

WE have already mentioned that carts are not made use of in this county. Every thing is carried on the pack-saddle, for which both horses and mules are used. Mules have lately come greatly into use, particularly for carrying and recarrying the produce and supplies of the mines; for which great numbers are wanted, and they sell at a very high price. Sixteen, eighteen, and twenty guineas are given for a mule. The common horses are small, but very hardy, and well adapted to a hilly county. They might, however, be much improved by a little attention to a proper choice of mares and stallions.

SHEEP.

THE common sheep in Cornwall are the same as the neat breed of Devonshire. They have a small species of this kind of sheep in Gwithian, which have very small tails, and a very well formed animal, and small boned. The horned sheep are also to be found in some parts. At Boconoc, the seat of Lord Camelford, they have a stock of Dorsets, consisting of a thousand head of sheep; they have a range of about 500 acres of land, all of which is in grass, but about forty or fifty acres, which are broken up for the purpose of keeping the

few cattle that are necessary on the farm, and for some turnips to give the breeding ewes in winter. They shear about four pound of wool, and the wether sheep are sold off, at about 11. 5s. and from that to 11. 8s. each.

The shepherd is a Dorsetshire man; remarkably careful and honest; yet I am well assured that this stock does not produce any thing like a fair rent for the land. The shepherd imputed it to the small quantity of wool, and to their not having a high price for early lamb, which makes a great part of the profit of the Dorsetshire sheep-farmers. Does not this evince the great propriety of considering local situation as extremely important in the calculation of rural improvements? †

The Leicester sheep have been introduced into Cornwall by Sir William Molesworth, who purchased them from Saltram in Devonshire. They are found to answer very well. This gentleman has this year procured a few immediately from Leicestershire. Sir John Saint Aubyn, in the west of the county, has also introduced the Leicestershire breed.—Sir Francis Basset, on an experimental farm, which he has taken up with his usual public spirit, means to try both the Leicester and South Down breeds. Tehiddy is situated in the midst of the mining country, and in respect of natural advantages of soil and exposure, presents many difficulties to advancement in cultivation. The study of chemistry, which Sir Francis had attended to for amusement, he has applied to the useful purposes of examining the various strata around him. He has already discovered several valuable species of marles, hitherto neglected, the effect of which he means to try on his experimental farm, for the conduct of which he has engaged a man from Suffolk, recommended by Mr. Arthur Young. The process, and the various experiments, are to be open to the farmers and public. I am confident it will be productive of the best effects, and it is to be hoped

† without a Doubt, and from the
~~Revenge~~, chiefly & arise ill-founded
 Reports from "hasty" observers.

hoped, will be followed by similar experiments of other gentlemen of fortune in the county.

The remote situation of Cornwall renders such experiments extremely valuable, as it is not in the power of the common farmers otherwise to acquire a knowledge of the effect of new improvements.

SECT. VII.

DUTCHY LANDS IN CORNWALL.

WE have already stated that the Dutchy of Cornwall was conferred by Edward the Third on Edward the Black Prince, and to the first begotten sons and heirs apparent of him, and his heirs, being Kings of England, for ever. So that it seemed the intention was first, that none should be Dukes of CORNWALL but such as were eldest sons and heirs apparent of the Crown, and that when there was any fail of such person, then that the dignity should remain in suspense until such son and heir apparent again were extant. Secondly, that the said son and heir apparent, without any further solemnity or creation, should presently, upon his birth, being then heir apparent to the King, or from the time that he is heir apparent to the kingdom, be also Duke of Cornwall.

This, it may be remarked, is very different from the principality of Wales, which requires in every new succeeding prince a new creation, and gift of the principality. Having been requested by several of the gentlemen of the county to state the nature of the holding of the dutchy lands, and to enumerate the different manors, some discussions also having

*all this Section is not
very material to agri-
culture & might as well
be omitted - being
only extracted from
the Rolls & Domesday*

ing taken place with regard to them, which are essentially connected with the improvement of the agriculture of the county. I hope the Board will not think their time thrown away if I lay before them, at some length, an explanation of this part of the territory of the dutchy situated in Cornwall. There are other lands in other counties also annexed to the dutchy of Cornwall, with which those in Cornwall are so connected, that it may be proper just to enumerate them.

First, then, in the county of Cornwall are the following, granted by charter 11th of Edward the Third.

+ how?

COUNTY OF CORNWALL.

1. The castle, manor, and park and borough of Launceston, with its appurtenances.
2. The castle and manor of Trematon, and the borough of Saltash and the park there, with the appurtenances.
3. The castle, borough, and manor of Tynntagell, which is supposed to be the place of birth and seat of King ARTHUR.
4. The castle and manor of Restormell, with the park there.
5. The manor of Clymesland, and park of Kerrybollock.
6. The manor of Tibesta, with the bailiwick of Powdershire.
7. The manor of Tewynton, with the appurtenances.
8. The manor and borough of Helston in Kerier, with the appurtenances.
9. The manor of Moresk, with the appurtenances.
10. The manor of Penkneth, with the appurtenances.
11. The manor of Peulyn, with the park there.
12. The manor of Relaton, also Rillaton, with the beadlery of Eastwyvelshire.

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13. The

13. The manor of Helston in Trigshire, with the appurtenances, and the park of Hellesbury.

14. The manor and borough of Liskerd, and the park there.

15. The manor of Kallestock, with the fishing there, and its other appurtenances.

16. The manor of Talskydo, with the appurtenances, in the said county of Cornwall.

17. The borough or town of Lestwithel, together with the mills.

DEVONSHIRE.

18. The fee farm of the city of Exeter, twenty pounds per annum.

19. The manor of Lydford, with the appurtenances, together with the chase of Dartmore.

20. The manor and borough of Braduish.

21. The water and river of Dartmouth.

IN DIFFERENT OTHER SHIRES, DISPERSEDLY.

22. The castle of Wallingford, with the hamlets and members thereof, and the yearly farm of the town of Wallingford, with the honours of Wallingford and St. Valeries, in the county of Oxford, and in all other counties where-soever the said honours do lie.

23. The castle, manor, and town, of Berkhamsted, with the park there, and together with the honour of Berkhamsted, in the counties of Hertford, Buckingham, and Northampton.

24. The manor of Byfleet, with the appurtenances, in the county of Surry.

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25. The

25. The castle and manor of Meere, in the county of Wilts.

26. The castle and manor of Knaresborough, with its hamlets and members, together with the honour of Knaresborough and York, and else wheresoever the said honours do lie.

27. The manor of Isleworth, in the county of Middlesex.

28. The manors of Kennington and Frankshall, together with a meadow in Lambeth and Newington, in the county of Surry.

29. The manor of Rising, with all the appurtenances, in the county of Norfolk, and the fourth part of the Talbott, in Lynne, with all the appurtenances in the aforesaid county.

30. The manor of Chislemore, and four score and eighteen pounds six shillings and eight-pence per annum rent, with the appurtenances, in the city of Coventry, which were then in lease to the queen's mother, for her life.

These revenues were so annexed to the dutchy, by the words of the charter, as to be in no case whatever aliened therefrom; and as it afterwards appears, that no king thought himself justified in severing away these lands from the dutchy, without annexing to the same other lands of a much greater value in lieu thereof.

And accordingly it appears, that King Henry V. in the ninth year of his reign, having founded the monastery of Sion, severed the manor of Isleworth from the said dutchy, and in lieu thereof conferred divers other manors in Somerset, Dorset, &c. which exceeded in annual value the lands severed, by the sum of two hundred pounds.

King Henry VIII. also, at his parliament, holden at Westminster, the thirty-first year of his reign, and prorogued on divers occasions until the twenty-fourth day of July, in the thirty-second year of his reign, did sever the castle of Wallingford, and all lordships, manors, lands, tenements, and other hereditaments thereunto belonging, from



the dutchy of Cornwall: and in lieu thereof, there was annexed to the said dukedom divers manors in the county of Cornwall, viz. The manors of Westanton, Port-Low, North Hill, Port-Pigham, Laudren, Triloweia, Tregonoe, Trelagan, Crosthole, Trevitherne, Courtney, Landulph, Leigh-durant, and Tinton; and all other his lands in the said places, which came to the said king, by the attainder of treason of Henry Courtney Marquis of Exeter; also, the manors of Austell, Fentregan, Tremeynalls, Tremagevon, Fowey, Credyowe, and Portneaprior, in the county of Cornwall, which came to the king's hands by the dissolution of the priory of Trewerdreth, in that county; also, all the manors of Breadford, Caverdon, Clymesland, Pryor, Treworgy, Stratton, Eastway, Bowyton, Bradrissey, Buchlaurue, and Bonyalvey, which came into the king's hands by the surrender and suppression of the priory of Launceston.

By the above, and other accounts and records, it appears, that the said dutchy of Cornwall consisted formerly of ten several castles, which in ancient times were places of great consequence and strength; they are now all in ruins and gone to decay. There were, in ancient times, nine parks and one chase or forest, all of large extent, and replenished with deer. They have long been disaforested, and by various encroachments are rendered of little or no value to the Prince. The dutchy also contained fifty-three manors, many of which were of great yearly rent of assize. Of ancient boroughs and towns, there are within the said dutchy thirteen in number, formerly of great power and influence. There are nine several hundreds parcel of the said dutchy, besides extensive tracts of waste and moory grounds, included in or adjoining to the various manors.

At present what remains of these extensive possessions, are farmed on leases of lives, subject to small ancient quit-rents, and renewable for fines, in some instances certain and

others arbitrary. The revenues of the dutchy of Cornwall, as appears from the accounts of the receiver of it, in the fifteenth year of King Henry VIII. amounted, of clear annual value, to 10,095*l.* 11*s.* 9*d.* This is a large sum for these days; and this without the casual revenues from reprises, &c. The coinage dues, which form part of it, amounted to 277*l.* 3*s.* 9*d.* So that the clear revenue from the dutchy lands amounted to 7324*l.* 8*s.* 0*d.* In the reign of James I. the revenues belonging to the Prince of Wales, from the dutchy of Cornwall, the principality of Wales, earldom of Chester, and various other lands, amounted to 100,000*l.* per annum, being *a clear rent from lands*. In the troubles that followed, and afterwards from the various necessities of the Crown, the whole of these lands in the principality of Wales, and earldom of Chester, were alienated, and the dutchy lands of Cornwall are the only part of these valuable hereditary revenues which now remain to the heir apparent.

The lands of the dutchy of Cornwall being farmed on leases of lives renewable; some for a fine certain, others upon a calculation of the improved value; it is not easy to ascertain the yearly value, which depends upon the falling in of lives. The great number of small rents are expensive in the management and collection. The fines also to be calculated upon improvements, operate directly against all improvements on so precarious a tenure as that of lives. It has therefore happened, that the value of the dutchy has not been improved, in an equal degree with the land around, belonging to private proprietors, unless in situations such as Kennington and Lambeth, where situation is so favourable to improvement. The chief, and greatly improved part of the revenues of the dutchy, is not that which arises from the lands, but that part which arises from the duty upon the coinage of tin, which is under the direction and management of the officers of the stannaries, a distinct branch of His Royal Highness's establishment from that

that under which is the management of the lands. On account of the exportation of this metal to the East Indies and China, this trade has been restored to a very flourishing state; and the revenues arising from the coinage are likely not only to be more steady than formerly, but in all probability will be considerably increased. But as this mode of disposing of the surplus tin is yet in its infancy, it would be too sanguine to calculate upon great expectations. To give, therefore, an idea of the revenues of the dutchy, the coinage dues cannot be stated higher than 10,000*l.* on an average. The landed revenues may amount to 5,000*l.* per annum.

But the revenues arising from the lands, annually, cannot be accurately ascertained, for the reasons I have stated, the ancient quit-rents being extremely small, and the profits arising from the fines casual and uncertain. Much attention has been lately paid by the gentlemen in whose department the business of calculating the fines lies, to ascertain the real improved value of the different estates; and by their diligence and fidelity I have reason to believe, that the revenues arising from the dutchy lands are considerably improved; and that, I am persuaded, without doing any thing which may justly be deemed harsh or oppressive. Perfectly confident, that in as far as the rights of his Royal Highness the Prince of Wales extend, the Council of his Royal Highness pay every proper attention, and give every fair encouragement to propositions for the farther improvement of the territory of the dutchy of Cornwall. I flatter myself it will not be considered as too presuming, if I present, for the information of the Board, such measures as have been suggested by the gentlemen of the county, as in their opinions tending to be of great mutual advantage to the illustrious personage who now holds these lands, and to the public.

The first proposition which has been suggested to me is, that a sale should be made of the whole of these lands, the
produce

produce to be laid out on the purchase of an estate, and settled by parliament, to the same uses as the present lands of the dutchy have been settled. Secondly, That instead of an entire sale, a commutation be made of those lands held by leases on lives, with arbitrary fines, into ancient dutchy, or a species of copyhold, and the value given for such commutation laid out in the same way as suggested in the proposition for sale. With regard to the proposition, there is little doubt that the dutchy tenants would be willing to pay a much greater number of years purchase for the various chief-rents and lease-holds, than the common market price would allow; and that the produce of such sale might be appropriated for the purchase of such lands as might produce a greater annual revenue, and be more easily improved than a great part of the dutchy lands. But there is an objection of great weight to such a sale, that would naturally present itself to parliament on the discussion of such a question :

That it appears, that from very ancient times, it has been the uniform sense of the constitution of this country, that an independent provision should be settled on the heir apparent of the Crown, in order to enable him to support the exalted rank he possesses, as the first subject in the kingdom. Of this independent provision, consisting anciently of great landed revenues, the dutchy of Cornwall is the only part which now remains unalienated, and which has been so specially settled by the Crown, and so repeatedly confirmed by parliament, that very cogent reasons must be adduced to justify a sale. Perhaps, also, it may hereafter be thought proper by the Crown to settle on the heir apparent an independent provision, as in ancient times ; and as the dutchy of Cornwall is the only memorial left of that ancient provision for the heir apparent, parliament would be very careful that any such sale, if it should be proposed, should not tend to diminish the value of the dutchy, as well as the rights of the heir apparent.

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With regard to the second proposition, of a commutation of the leasehold into ancient dutchy, it does not appear so highly objectionable, as the manerial rights would thereby be still kept up. But I am apt to apprehend, that although some would be willing to give a proper value for such commutation, yet it would be by no means general. Those who had full lives would not be ready to give any valuable consideration.

There is, however, a third proposition which is highly worthy serious consideration, and which in particular instances has been much under the investigation of the Council of his Royal Highness; that is, the improvement of such waste lands as form parcel of the dutchy.

SECT. VIII.

WASTE AND COMMON LANDS, IN THE DUTCHY AND {COUNTY OF CORNWALL.

THOSE lands in England are denominated waste, which remain in their original uncultivated state, although in many parts of them sheep and cattle are pastured, by those who are entitled to rights in common on those wastes. In Cornwall, as nearly as I have been able to calculate, the proportions of waste and cultivated land stand thus: one-third part of the county is under a regular course of husbandry; one-third is in furze crofts, which are only broke up once in

** Surely this statement is
very erroneous not 1/10th part
is in that state or so broken up*

in twenty-five or thirty years; the remaining third is wholly uninclosed, consisting of marshy grounds, intermixed with rocks and mountains, and in the west, with extensive tracts of waste land, almost plains. This third and last part is almost wholly dutchy land; in particular, all the waste lands on Hengston Downs, Linkinhorn, Caradon; and from thence, extending to those wastes between Five Lanes and Bodmin; also Bodmin Downs, &c. in the eastern part of Cornwall; also the extensive wastes in the parish of St. Agnes, and its neighbourhood, St. Austle Downs, &c. &c.

In all these I have heard of no attempt to improve and inclose, except St. Austle Downs, adjoining to which, Mr. Charles Rashleigh has lately erected a harbour, with a degree of correct judgment and great spirit, which does that gentleman much honour. Instead of building works out a great way into the sea, which was the old and injudicious practice in making harbours, he has, at great expence, excavated the land and rocks inward, by which, when finished, a most commodious harbour will be formed, of great importance to that part of the country, and to the trade passing that part of the Channel.

The harbour of Polmeer, and Mr. Seal's new dock at Dartmouth, furnish two admirable instances of public spirit in individuals, and, considering the disadvantages of local situations, deserve to be ranked with the magnificent docks erected by Mr. Perry at Blackwall.

Adjoining to Mr. Rashleigh's harbour, there is a large tract of waste ground belonging to his Royal Highness the Prince of Wales, which has been granted to Mr. Rashleigh by the Council of his Royal Highness, on terms which do honour to the liberality of the Council, and which will hereafter be a great improvement to the dutchy. This is a striking instance of the advantages which arise from the example of individual enterprise in all parts of this kingdom. Mr. Rashleigh has leased out a considerable part of this waste in

[Cor.]

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small

*This is also a mistake
in point of Quantity*

small lots; for which he receives a rent of about seven shillings and six-pence per acre. The occupiers, by the advantage of pilchard salt, and broken pilchards, and of dung from St. Austle, and sea sand, will soon be able, at a moderate expence, to make these fields worth thirty and forty shillings per acre. This example has awakened general attention; and I have received several proposals for similar grants, to be laid before the Council of his Royal Highness; and although none of them can boast of so advantageous situations, yet all of them will, no doubt, turn out very advantageous to the adventurers, to the improvement of the county, and of the dutchy.

I am persuaded that there is, at the very lowest calculation, 100,000 acres of waste lands in this county, which may be valued at seven shillings and six-pence per acre, which would produce an annual rent of 37,500l. per annum, and leave a sufficiency of turbary for fuel, if properly regulated. What an advantage would arise from such improvement to the force and wealth of this country! Is there not, in every county almost in England, prodigious tracts capable of similar improvements? When we look across the Atlantic, and perceive the weakness of the American government, insufficient, from the want of an executive power, to protect themselves against the incroachments of the Indians, is it not natural to conclude, that all men will prefer an ancient and settled country, with a free and vigorous government, possessed at the same time of an infinity of resources for trade, commerce, and manufactures? In the waste lands of this kingdom, there are sources, both in the improvement of the soil, and the production of its mines, for the employment of additional millions of people. Far from having arrived at its *acmé* in agriculture and internal improvements, this kingdom may be still considered in its infancy. Defended as it is by nature, and by the spirit and good sense of its inhabitants, against the attacks of external

* Perhaps not worth 1:6
 & are now & certainly
 might be made worth
 17:6 if enclosed & cultivated.
 12.

* highest pitch - farmers
 will not undertake to make

ternal or internal enemies to its happiness and independence, we may look forward with confidence to a state of prosperity hitherto unexampled in the annals of mankind.

SECT. IX.

WOODS AND PLANTATIONS.

THERE is a good deal of coppice wood in the county of Cornwall, but little timber. Formerly the tin was smelted only with charcoal; and this made them cut down their woods, and keep them in coppice; so that there is not a great quantity of timber; although, from what is to be seen around the seats of many of the nobility and gentlemen, there is no doubt that timber will thrive as well in many parts of Cornwall as in other counties.

The nine ancient parks belonging to the duchy of Cornwall, which we have mentioned, were all of them covered with large forest trees, and a great quantity of coppice wood. But, when in the reign of Henry VIII. they were disparked, agreeable to the plan he had adopted, throughout the kingdom, for encouraging agriculture, the wood was mostly destroyed; and what remained, has, by want of care, dwindled almost to nothing; and by some mismanagement, the royal intention of rendering the ground more profitable, by being turned into tillage, has never answered.

There were formerly, also, some extensive forests which are now covered with the sea, particularly between the Ram-head and Loo, and between St. Michael's-Mount and Penzance.

In many of the vales on the Tamar, Alan, Camel, Fal, and Fowey, there are considerable quantities of coppice

not so well + generally,

*How & where does this
appear, or how is it known
to: in the Dreams of Antiquarians
— not it is possible!*

woods, and a good deal of planting, and some old timber, particularly at Tregothnan, Carclew, Port-Eliot, Anthony, Tehidy, Clowance, &c.

At Trevetho, Mr. Pread has taken a great deal of trouble to raise his plantations, in a situation where they are exposed to both the south-west wind, and also the northerly winds, being the highest ground between the Bristol Channel and St. George's, in that part of the county.

After making a great number of unsuccessful experiments, at a great expence, in order to find out some hardy plant that would shelter the more tender trees, he was led to try the pine-aster fir, from observing that this tree grew well spontaneously, from some cones which happened to be accidentally scattered in one of the fields near his house. The pine-aster is not a valuable wood, nor is the form of the tree beautiful; but it has been found to stand the sea air surprisingly without being injured. This tree Mr. Pread plants on the highest parts, and very thick in the outer rows of the plantations, and within he plants oak, ash, elm, plane, &c. all of which flourish extremely well under this shelter. He sometimes also plants large groves entirely of pine-aster, and when grown up to the height of twelve or fifteen feet or more, he cuts down those in the internal part, and plants forest and other trees of large growth, which all answer extremely well. Mr. Pread made an observation respecting the raising of the pine-aster from seed, that is worth attending to. He found that sowing the seed in spring, as is commonly done by the nurserymen, did not answer his expectations. He therefore threw a number of cones in an inclosed place, where he observed that they opened naturally, and dropped their seeds in the beginning of June, which is the time he has since made use of to sow the pine-aster seeds, both in the fields and in his nursery. A careful observation of the operations of nature, is undoubtedly the foundation of all science, and more particularly of every

every branch of agriculture. When the famous Brindley was examined before the House of Peers, respecting the Duke of Bridgewater's canal, he was asked by a noble lord, how he had contrived to render the banks of the canal in a particularly difficult part firm? He said, he sowed rushes on the banks. He was again asked, in what season he had sown them? He answered bluntly, "I observed the time that the rushes shed their seed; I sowed them as nature did; could you have done better, my lord?" These little examples may afford hints of similar observations, in a variety of instances. Mr. Pread, who has certainly been very useful to the county of Cornwall, by introducing the pine-aster as a shelter from the severity of the south-west wind, has been followed by most of the gentlemen in the western parts of Cornwall, with great success; and the spirit of planting is spreading very rapidly. Sir John St. Aubyn has lately planted ninety-three acres with a great variety of forest trees, at Clowance, where there is also a great quantity of fine old trees, planted by his father and grand-father, who introduced the beautiful eastern plane into the county, and which is here of a very large size. Sir John St. Aubyn has also planted the pine-aster at St. Michael's-Mount; and it flourishes well, although exposed in winter even to the spray of the sea. At Godolphin there is a very ancient plantation near the house, and indeed in so many other places, that it is obvious it is not owing either to soil or climate, that there are so few trees in Cornwall. It is particularly defective in not having trees, and hardy shrubs, or quicks, in the hedge-rows which divide their fields. The sod fence, which is the common mode of dividing them, affords a dreary prospect, and is a very indifferent shelter for cattle or sheep.

Here again is a vast object for the advantage of the public, and of individuals, that of planting those waste lands that would not return a profit by tillage. Plantations of wood are always sure to answer best by being made on a

3

large

+ much more, ^{are} fit for planting
- than for Tillage - the greater part
- being that where Moor Stone is found -
being ~~found~~ unfit for the latter +

Mr. F. seems not to have been informed that there is much Land seemingly fit for Tillage, adjoining the Hills, in this County, where Corn (wheat) grows well - but tho' till'd early, & skillfully, never will ripen properly + but continues green - or rusty - & slowly vegetating until winter destroys it.

all that Mr. F. has said of
the Pine Aster is truly, and
well observed - I have known
the Scotch Fir stunted where
the pine aster has thrived,
intermixed with each other.

* Mr. F. observes rightly on this
Disgrace to the County - Since
there are many plants & shrubs
(planted in October) which would
thrive in the sides and even
on the Top (with the roots
deep) of these Banks. -
among others a species of
upland Willow.

Ex^d from Mr. Speckly

large scale. Planting 30, 40, or 50 acres together, saves expence in fencing; the trees shelter each other, and encourage each other's growth; and in ten or twelve years time the weeding and pruning for faggots will begin to make no trifling returns in a country where fuel is so very scarce as in Cornwall.

SECT. X.

FRUIT TREES.—CIDER.

*The planting of
Orchards increases—
yet so much more is
necessary—that it seems
a fit object for a
Premium. &c. &c.*

FRUIT-TREES are every where found to thrive, particularly the apple; and in the eastern part of the county a great deal of cider is made, and of very good quality; but very little is produced to the west of Truro. It is a practice in Devonshire, of several gentlemen, to plant extensive nurseries of apple-trees, and give them away to any of their tenants, who will engage to inclose and plant a piece of ground for an orchard; an example very deserving of being generally followed in both counties.

The mulberry-tree flourishes well in Cornwall, in the western parts, and the fruit ripens in perfection. The President of the Board has, on this account, recommended the experiment of breeding silk worms; but, from some experiments which have been made, I am afraid the climate is too moist for the growth of silk in any great quantity.

SECT.

SECT. XI.

SEED TIME AND HARVEST.

WHEAT is sown in the end of September, and from that to the end of October.† The harvest is about the first week of August. Oats are sown in February,† and barley in the beginning of March. In Mullion, and some parishes near the Lizard, they have sown barley, and in nine weeks, and often sooner, had it reaped and threshed. This is owing to the warmth of the situation, and the natural mildness of the climate. They have a practice in Cornwall of putting up their wheat, barley, and all other kinds of grain, in the field; into what is called arrish-mows. The sheaves are built up into a regular solid cone, about twelve feet high; the beards all turned inwards, and the but-end only exposed to the weather.* The whole is finished by an inverted sheaf of reed, or corn, and tied to the upper-rows. This custom is owing to the inconstant weather, and is considered as a better way of preserving the grain.† An intelligent farmer has made, in my opinion, a great improvement on this. He observed, that the corn brought from these mows into the barn, or the farm-yard, lost much in the carriage: he, therefore, built small ricks in his farm-yard, with an opening, or funnel, through the heart, and communicating with another funnel from the side, by which means the whole is kept well ventilated; and being near the barn, he does not lose in carriage. This gentleman, Mr. Grosette, near Truro, has also made another improvement, which deserves to be imitated, in saving his clover and hay, by stacking it when half-made, and putting between the layers old straw, which prevents its heating, and imbibing also the juices of the clover; and rye-grass is greedily eaten by the cattle, cut from the stack along with the hay.

Another

+ Even to Christmas - the middle,
(general time - October - 2
+ much later, generally, -
good Farmers have this saying -
& believe - ~~the~~ Cold micks Days for wheat,
& - new cold, Lady Days for Oats -
& - and April for barley - 2

* called arrish Mows
of may be carried to the
yards at the most conveni-
ence, when so stacked
they can take no harm
except being blown down
sometimes by hard Winds.

+ This seems a sensible Observation, & Improvement.

- The arrish Mows are frequently blown down by high Winds -
and always attended with some Waste - besides being subject
to mice - thus staying in a State for Winter - 2

Another improvement has also been suggested to me, instead of placing the dry straw in layers in the ricks, to strew it amongst the hay and rye-grass in the field, and afterwards stack it as before. This mixes it more completely, and also prevents it from heating.

SECT. XII.

GENERAL OBSERVATIONS ON THE MEANS OF IMPROVING THE AGRICULTURE OF THE COUNTY OF CORNWALL.

I HAVE already stated the circumstances which lead the inhabitants of this county to employ their capital in mining, and the various branches of trade connected with it, in preference to agriculture. The maritime situation of the county also offers to them the various branches of the fisheries, as another object for the attraction of their industry, which diverts their attention from the operations of husbandry. These two great objects of the mines and the fisheries, form, throughout almost every part of the county, the primary pursuits of the inhabitants. Agriculture is only a secondary consideration. Seldom do you find a man's capital and industry solely directed to the produce of the plough. The division of labour has been well explained by Dr. Smith, in his admirable book on the wealth of nations, to be a great source of productive revenue. It cannot be doubted, that if the husbandman was to employ his capital and industry in improving his breed of sheep and cattle, and cultivating his lands, it would tend much more to his advantage, than adventuring in the mines and the fisheries, which

*East & North or West of
a line drawn from Bosc
to Padstow there are no
mines, & the fishing
except at Polparrow. all
the land as observed before
is employed in agriculture
& feeding or rearing
cattle - and that is
about equal to half
the county. It is most
of this land where
mining & fishing prevail -*

*Mr. F.'s Intelligence & observations are, clearly drawn from
a partial source - the West of Cornwall only -
It is a pity this Gentleman should have been confined
in Time -*

which ought to be left to those who apply all their skill and industry, as well as capital, to these objects.

Agriculture must be practised as a trade, to render it either profitable to the individual, or to supply superabundance of produce to the community. It is another question, which has been much agitated, whether that trade is best carried on by small tenants, or by extensive farms, managed on a great scale, with a large capital. Without entering into an investigation of a subject which has already employed some of the ablest writers upon political economy, I shall only observe, that this question, like many others, cannot be determined on general grounds, without having reference to local situations and circumstances, which may affect one part of the kingdom more than another.

The business of fisheries, and of mining, cannot possibly occupy, from their nature, the whole time of individuals, and in so remote a county as Cornwall it is proper they should be encouraged to cultivate little farms of their own, for the more easy subsistence of themselves and families. But it would be very desirable, that there were an intermixture of large farms, to hold out an example of proper cultivation to the smaller tenants, and to supply superabundance, which, perhaps, cannot be produced equal to the demand of a manufacturing and commercial nation, without agriculture is carried on upon a large scale, and employing extensive capitals.

Premiums for the best breeds of cattle and sheep, and for the greatest number of roods of fencing and draining in particular districts, would have great effect in encouraging agriculture in this county, in which it would be a great thing if Government would allow a sum to be distributed by the Board of Agriculture in aid of the local subscriptions in the less improved and more remote counties.

Much has everywhere been stated to me respecting tythes, as a hindrance to improvement. I do not apprehend that there

[Cor.]

† negatur. ~

*This is a very wrong
Idea, & should be*

*advanced with caution
or wholly omitted*

** Is there no method to
be found whereby to estimate
and proportion the rise,
or Fall, in the Value of
money, to Corn - & other
Tithes ? ~*

is much real foundation for these complaints: It must be acknowledged in general, that the clergy do not at present receive their full rights. The inconvenience seems to be, that there is no particular fixed rate, and which constantly varying, occasions perpetual disputes. It would perhaps be better for the clergy to follow the example of the lay tythe owners, and raise their tithes to the utmost value at once. It would then become a question of policy and prudence whether they should be fixed at that value, or any deduction made.

* There may be a compensation, but no equivalent in lieu of tithes; for whatever limits the value, injures, strictly speaking, the rights of the clergy. But as the capital invested in agriculture daily increases by improved modes of cultivation, and the profits are continually kept down by competition, it certainly would be a desirable thing for the clergy, as well as the country, that some principle of valuation should be fixed, instead of being exposed to constant litigation and dispute. At the same time, this very circumstance of fixing a valuation is contrary to the rights of the clergy; and as the value of money is continually decreasing, any such valuation would in the course of time become much inferior to what it might be at the time of valuation. This has actually happened in the northern part of the kingdom, where the tithes had been settled by a commutation, which at the time it was made produced an income to the clergy that was adequate to their support, but from the decrease of the value of money, and the increase of the expence of living, their incomes are by no means adequate to support them in that independent situation in which it is for the interests of the state that the clergy of an established church should be placed.

The whole of this subject is of great importance, but would require much more attention than I could possibly give to it, in order to enable me to form any decided judgment on the subject. I can only say, in justice to the very re-

spectable

respectable body of clergy in the two counties which I had the honour to survey, that they are in general contented with very moderate compositions for their tythes; and that I am persuaded, were an accurate account taken of the whole of the diocese, it would be found that the number of parishes where there was any litigations or disputes respecting their tythes, are very few indeed in comparison to those where the people live in harmony with their pastors.

++
true — and yet too many is

INLAND NAVIGATIONS.

THE greatest advancement to agriculture and internal improvements has certainly taken place from the late extension of inland navigations in the different parts of the kingdom. A very important communication of this kind was, last year, set on foot by Sir William Molesworth, and other gentlemen in the eastern part of the county. It has for its object to make a navigable canal from the north to the south of the county, in order to form a communication between the Bristol and St. George's Channel, from an arm of the sea which forms the harbour and road of Padstow, on the north, to the river and harbour of Fowey, on the south. This navigable canal ought certainly to be made of a sufficient depth for large sea-built vessels; and on the north, ought to be carried as near the harbour of Padstow, as may be found practicable, thereby to avoid as much as possible the narrow and difficult navigation in that river, which is very much choaked by the sand driven in from the Bristol Channel. It has this great advantage, that is, a most plentiful supply of water at the summit, and the ground through which it passes very practicable. The expensive part of this canal will be on the northern part, in order to form a proper and ready communication with the sea, and to bring it into deep water. But this ought not be spared by the subscribers, as it will be amply compensated by the facility of

+ narrow central. —

the trade arising from thence; and they can afford such an extra expence more easily, as from the natural excellence of the harbour of Fowey, they will have little or no extra expence on the south side. This canal, if made of a proper depth for large sea-built vessels, will enable all vessels from Wales, Bristol, &c. to avoid the dangerous and circuitous passage round the Land's End, which will be of great importance to the trade of that part of the kingdom, and enable the farmers, on the southern coasts of Devon and Cornwall, to purchase culm for burning their lime at a much cheaper rate than heretofore. The conveyance also of sea-sand, and other articles, coals also for the mines, will thereby be facilitated, and be attended with many other advantages to agriculture and commerce, which would take up too much time here to enumerate. I shall only add, that having examined the different lines proposed for making this communication, I can take upon me to say, that a navigable canal from the river Padstow to that of Fowey, is practicable, and at a moderate expence; and that I hope the gentlemen who have brought it forward will proceed with spirit, and determine upon making it on the largest and most generally useful scale for the trade of that part of the kingdom; being thoroughly convinced, that although the expence will be much greater at first, it will thereby, in the end, return them a greater profit for the money so laid out. The distance may be from eight to ten miles; there will be, however, a considerable lockage necessary; but I think the summit may be greatly reduced by cutting down.

Another canal for boats was also set on foot last year by Lord Stanhope, from Bude Haven by Holsworthy, and from thence towards Hatherleigh, in Devonshire, chiefly for the conveyance of sea-sand to the internal parts of the country; but I understand the line is not yet agreed upon. A canal has also been talked of from the river Hele, on the north,

*This is not quite
so clear & easy.*

*† It was set on Foot
and an Act pass for the purpose
"from Bude to the navigable part
of the Tamar" - many years
since & before Lord S. had
suggested his present Scheme
and had the Sanction of
Mr. Smeaton. &c.*

to Mount's-Bay, on the south ; a distance of not more than four or five miles. The summit here is very short, and, I imagine, might be cut down so as to render the lockage very easy indeed. The ground, on account of the great number of mines and lodes, would perhaps be difficult to hold water : it is, however, an object deserving an accurate investigation. There is a sufficiency of water, which may be brought to the summit. Other canals of communication might easily be made, which would save a vast deal of land-carriage in the mining part of Cornwall, and be a vast advantage in supplying the mines, and carrying their produce ; for which purpose, at present, they are obliged to keep an immense number of small horses and mules, which would then give way to the more profitable stock of sheep and cattle. A great advantage will arise to this county from the Swansea canal, which will tend to keep down the price of coals at that port ; and if, by small canals, this necessary article could be conveyed to the internal parts, at an easy price, the poor might be supplied with fuel so low as to preclude the necessity of paring the surface of the waste grounds to supply themselves with fuel, thereby destroying its fertility ; and these extensive wastes might then be converted into arable and pasture lands, to the great advantage of the community. As, tending to the improvement of the county also, it would be desirable to have more harbours on the northern coast, opposite to Wales. One, viz. at St. Agnes, is now building under the sanction of Parliament, by a joint stock company formed for that purpose.

The communication between the copper and tin mines of Cornwall, and the coal mines of Wales, is most important. The attention paid by the representatives of this county to the proposed communication with the port of Swansea, demands the warmest thanks of the people of Cornwall.

CON-

CONCLUSION.

THE advancement of agriculture in the county of Cornwall is an object of very high importance with regard to this county, in so far at least as to afford a regular and constant supply to that part of the county, where the people are chiefly employed in the business of mining. This may be done in two ways; by improved modes of cultivating the land already inclosed, and under a course of husbandry, and by inclosing and improving the waste lands of the county, in as far as that can be done without bearing hard upon the rights exercised by individuals, and sanctioned by custom. There is in both these ways vast objects for the exertion of the industry of the people, and room for the beneficial employment of vast numbers of people. To enter into the detail of these circumstances, and to point out the particular objects, and various extent of these objects, cannot be included in this sketch. From the information which will no doubt be conveyed to the Board on these subjects, from the intelligent individuals of the county, and from the very respectable Society of Agriculture lately established, much interesting information may be expected. I have only to regret, that I have not been able to do sufficient justice to the subject; and that from the little time I had to make my survey, I have not had it in my power to describe particularly the operations of many public spirited individuals: and I thought it would look too much like vanity in me to mention their names without doing honour to their works. I have only to add, that the great civilities and attention I met with to the objects of the Board, demand my warmest thanks, and afford, at the same time, the highest hopes that the Board will meet with every aid from the gentlemen and the inhabitants of this county, in the promotion of their public spirited endeavours to improve the agriculture of the kingdom.

Upon the whole

Upon the whole it does not appear that much is said of the present state or course of Agriculture in the County, or of the quality of the Land - nor are there any valuable remarks or hints for improvement. Most certainly improvement is practicable & wanted; but I conclude Mr. Thayer had not time, or was not there in a season to examine or suggest, the means of supplying the Defects -

POSTSCRIPT.

No. I.

AS Irrigation has become of such consequence to Devonshire, it may not be improper to give the following description of a simple but excellent implement, to take the levels for watering grounds, lately brought into this country by Dr. Edwards, of America, and described by Dr. Anderson, in his Agricultural Account of Aberdeenshire, in the following terms:

DESCRIPTION OF AN IMPLEMENT FOR TAKING THE LEVELS FOR WATERING GROUND. (See Page 40.)



“ Finding a part of a blank page left, and a spare corner in the plate, I cannot more properly apply these than to the description of a very simple apparatus for taking levels, for the purpose of conducting water courses for irrigation. It is one of those implements that are more adapted for use than show, but which, as being perfectly within the reach of every man, both in respect to its price, and the manner of using it, I consider as of inestimable value. It has been already recommended to the notice of the public, by the very respectable President of the Board of Agriculture; but it can never be too generally known.

“ It consists of two legs of deal, about twelve feet long, joined together at top, and below connected by a cross bar, as represented above; which is so simple as to need no description. From the angle at top is suspended a plummet by a small cord, and a mark being made in the middle of the connecting bar, it is plain, that when the two legs A and B are level, the string of the plummet will strike the mark on the bar, and not otherwise; so that the level is thus very easily ascertained.

The method of using it is thus. At the level of the water, where you are to begin, drive a pin into the ground, on which one of the legs of the frame can rest,

rest, then bringing the other leg round, till it touches the ground on a level with the top of that pin, there drive in another pin, and having adjusted the level perfectly, make use of this last pin as a rest for the one foot, and turn the other about till you find the level in the same way; and so on you proceed, following always the direction that will thus be indicated. In this way you discover at once, without trouble, the precise direction that your water course should hold, without being at the expence of digging through heights or filling up hollows.

"If you mean to conduct the water perfectly level, you have only to follow the pins thus placed implicitly; but if it is your intention to give the canal a certain degree of declivity, say a quarter or half an inch or more, in twelve feet, instead of wooden pins, in this case make use of one pin of steel, having the inches, halves, and quarters marked on the sides regularly from the square top downwards. Having provided at the same time a number of wooden pins cut neatly over at top quite square, after having fixed your iron pin quite level with the first, drive a wooden pin into the ground close by it: making the head of it go a quarter or half an inch lower than the top of the iron pin. Then pulling out the iron pin, and employing the wooden pin as a rest for one of the legs, put the iron pin in once more for the other leg, and driving a wooden pin into the ground once more, at a quarter of an inch lower, proceed forward in this manner, and your canal will have the same uniform degree of slope throughout its whole extent. In this manner the fall can be regulated to any assignable degree. A water course thus set off, is as marked from A to D; which might be continued to any assignable distance, on the same plan."

N. B. It is said that a similar instrument is made use of by the miners in Cornwall, for taking levels.

No. II.

THE Flocks in the Western Part of England being very subject to the Disease called the Goggles, &c. the following Remedy for it, which comes from a respectable quarter, is recommended to the Reader's attention.

RECEIPT FOR CURING THE WOOD EVIL, FROG ILL, RICKETS,
GOGGLES, OR SHAKING IN SHEEP.

THE disorders in sheep have been so little attended to, that it is difficult to learn the names of them; and when the names are obtained, they are, in different counties, applied to diseases accompanied with such very different symptoms, that unless the nature of the disease be previously described, any receipt may be as useless or injurious in one county as it is beneficial in another.

The disorder for which the following receipt is recommended, is a weakness and perfect debility in the loins; which, in different counties, is called by the names above mentioned. But shaking does not seem to be at all applicable to it, because the sheep is affected with no symptom of that kind. The goggles is a disease which affects the head, and is occasioned sometimes by a worm, and sometimes by water. In time, it makes the sheep turn always on one side, and gives the appearance of the whole side and loins being affected; but the seat of that disease is in the head. The frog, or hoof of the sheep, is not at all hurt, and therefore I would wholly reject the name of the frog-ill, for the present. The rickets, as descriptive of the disease known under that name amongst children, is accompanied with a weakness in the loins, and therefore may be applied to the present complaint; but as that name denotes other ailments also, I would affix the name of wood-evil only to the following disorder:

In the winter 1792, I had a sheep, which apparently had lost the use of his hinder legs: if raised from the ground he could not stand; and my shepherd, bailiff, and workmen, agreed that he was past all recovery, and must die very soon. Under these circumstances it was impossible to do any harm; and, recollecting, that for some time past, the nights had been very cold and wet, I concluded that the sheep was chilled and benumbed; therefore I blooded him, and prepared the following medicine:

Take penny royal, wild scabious, and shepherd's purse, of each half a handful; bruise them well, and boil them in three pints of ale; then strain off the liquid part, by hard squeezing and pressing the herbs; add cumrain seeds, fennugreek seeds, and carraway seeds, of each one ounce, and of London treacle two ounces: put these in a bottle and stop it close.

I gave the sheep nearly half a pint in the afternoon; the same quantity in the morning and evening of the next day, and the remainder of the bottle on the day after, when the sheep got up, walked away, has ailed nothing since, and has been fatted.

The medicine is not the worse for keeping, and will be found useful in many sudden complaints: but if given for a fever, omit the carminative seeds.

May 31, 1794.

A. B.

